DEPARTMENT OF
ECOLOGY
State of Washington

Concise Explanatory Statement

Chapter 173-360 WAC

Underground Storage Tank Regulations

Summary of rule making and response to comments

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Ecology publishes this document to meet the requirements of the Washington State Administrative Procedure Act (RCW 34.05.325)

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Concise Explanatory Statement

Chapter 173-360 WAC
Underground Storage Tank Regulations

Toxics Cleanup Program
Washington State Department of Ecology
Olympia, Washington 98504-7600

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Acronyms and Abbreviations

APA	Administrative Procedure Act
DoD	U.S. Department of Defense
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
MTCA	Model Toxics Control Act
RCW	Revised Code of Washington
UST	Underground Storage Tank
WAC	Washington Administrative Code

Chapter 1: Introduction

1.1 Purpose of this Document

The purpose of a Concise Explanatory Statement is to:

- Provide reasons for adopting a rule.
- Describe any differences between the proposed and adopted rule.
- Provide Ecology's response to public comments on the proposed rule.

The documentation is required by the Administrative Procedure Act (RCW 34.05.325).

This Concise Explanatory Statement is for the Washington State Department of Ecology's (Ecology) adoption of amendments to the following rule:

Title:	Underground Storage Tank Regulations
WAC Chapter:	Chapter 173-360 WAC
Adopted date:	August 8, 2012
Effective date:	October 1, 2012

To see more information related to this rule making or other Ecology rule makings please visit our web site: www.ecy.wa.gov/lawsandrules.

1.2 Regulatory History

In 1984, Congress passed Subtitle I of the Solid Waste Disposal Act (42 U.S.C. Chapter 82, Subchapter IX), which created a federal program to regulate underground storage tank (UST) systems storing petroleum and other hazardous substances and directed the U.S. Environmental Protection Agency (EPA) to establish requirements for UST systems to prevent releases. For more information about the federal law, see www.epa.gov/oust/fedlaws/statute.htm.

In 1986, Congress passed amendments to Subtitle I that directed EPA to establish financial responsibility requirements for UST owners and operators to cover the cost of taking corrective actions and to compensate third parties for injury and property damage caused by leaking tanks.

In 1988, EPA adopted rules establishing requirements for UST systems (40 C.F.R. Part 280) and minimum requirements for state program approval (40 C.F.R. Part 281). For more information about the federal rules, see www.epa.gov/oust/fedlaws/cfr.htm.

In 1989, the Washington State Legislature passed Chapter 90.76 RCW,[1] which directed the Department of Ecology (Ecology) to establish a state-wide UST program that:

- Addresses the serious threat to human health and the environment posed by leaking underground storage tanks containing petroleum and other regulated substances; and
- Meets the federal requirements for state program approval (RCW 90.76.005).

To accomplish these goals, the Legislature specifically directed Ecology to adopt rules establishing requirements for UST systems that are "consistent with and no less stringent than the federal regulations" (RCW 90.76.020(1)).

In 1990, Ecology adopted the following rules to achieve these statutory goals and objectives:

- Chapter 173-360 WAC, which establishes requirements for UST systems to prevent releases of petroleum and other hazardous substances.[2]
- Section 450 of the Model Toxics Control Act (MTCA) Cleanup Regulations, Chapter 173-340 WAC, which establishes requirements for responding to and cleaning up releases from UST systems.

In 1993, EPA approved Washington State's UST program. The State was one of the first states in the nation to be granted state program approval.

In 2005, Congress passed the Energy Policy Act. Title XV, Subtitle B of this act (titled the Underground Storage Tank Compliance Act) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the federal UST program. Among other things, the amendments directed EPA to establish grant guidelines for states regarding delivery prohibition, operator training, secondary containment, and under-dispenser containment. For more information about these amendments, see www.epa.gov/oust/fedlaws/epact_05.htm.

In 2007, the Washington State Legislature passed Substitute Senate Bill 5475 (Laws of 2007, Chapter 147), which amended Chapter 90.76 RCW. Among other things, the amendments directed Ecology to adopt rules that are "consistent with and no less stringent than the requirements in the … underground storage tank compliance act of 2005 (42 U.S.C. Sec. 15801 et seq., energy policy act of 2005, P.L. 109-58, Title XV, subtitle B)." For more information about the amendments, see apps.leg.wa.gov/billinfo/summary.aspx?bill=5475&year=2007.

[1] The authorizing state statute, Chapter 90.76 RCW, was enacted by the Legislature on May 12, 1989, and became effective on July 1, 1990 (Laws of 1989, Chapter 346). The statute was subsequently amended by the Legislature in:

- 1995 (Laws of 1995, Chapter 403, Section 639);
- 1998 (Laws of 1998, Chapter 155);
- 2007 (Laws of 2007, Chapter 147); and
- 2011 (Laws of 2011, Chapter 298, Sections 39 and 40).

[2] The state rule, Chapter 173-360 WAC, was originally adopted by Ecology on November 28, 1990, and became effective on December 29, 1990 (WSR 90-24-017). The rule was subsequently amended by Ecology in:

- 1991 (WSR 91-22-020);
- 1995 (WSR 95-04-102); and
- 1998 (WSR 98-15-069).

1.3 Reasons for Adopting Rule Amendments

The adopted rule amendments are necessary to implement changes to the state's UST program specified by the Legislature in 2007 in Substitute Senate Bill 5475, which amended chapter 90.76 RCW. Those changes are necessary to:

- Comply with the new federal requirements in the Underground Storage Tank Compliance Act of 2005 (42 U.S.C. Sec. 15801 et seq., Energy Policy Act of 2005, P.L. 109-58, Title XV, subtitle B).
- Reduce the number and severity of releases of petroleum and other hazardous substances from UST systems, which pose a serious threat to human health and the environment, including drinking water.

The adopted rule amendments:

- Authorize Ecology to stop regulated substances from being delivered to UST systems that do not comply with regulatory requirements.
- Establish an operator training program for individuals who operate and maintain UST systems. Current operators must be trained by December 31, 2012.
- Require secondary containment of tanks and pipes installed or replaced after October 1, 2012.
- Require containment under dispenser systems if the dispenser, dispenser system, or underground piping connected to the dispenser system is installed or replaced after October 1, 2012.

An overview of each of these amendments is provided in the following chapters of this document.

1.4 Public Comment on Proposed Rule Amendments

On March 21, 2012, Ecology filed with the Office of the Code Reviser proposed amendments to Chapter 173-360 WAC, Underground Storage Tank Regulations.

On April 4, 2012, the proposed rule amendments were published in the *Washington State Register* (WSR 12-07-084). In addition, notice of the proposed rule amendments and opportunity to comment on those amendments were:

- Posted on Ecology's public involvement calendar and rule-making web sites:
  - apps.ecy.wa.gov/pubcalendar/calendar.asp.
  - www.ecy.wa.gov/laws-rules/activity/wac173360.html.
  - www.ecy.wa.gov/programs/tcp/regs/ust/2012/rule-making.html.
- Mailed to about 5,000 people affected by or otherwise interested in the rule making, including registered UST owners and facilities, service providers, operator training providers, business and local government associations, and environmental groups: fortress.wa.gov/ecy/publications/summarypages/1209045.html.
- E-mailed to about 75 interested people on Ecology's UST Rule listserv: listserv.wa.gov/cgi-bin/wa?A0=ECOLOGY-UST-RULE.

- Translated into Korean and distributed to Korean news outlets and business associations: fortress.wa.gov/ecy/publications/summarypages/1209045ko.html.
- Posted in three editions of Ecology's *Site Register* (April 5, April 19, and May 3) and distributed to over 1,500 people: www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html
- Distributed in a news release to news outlets throughout the state. The news release is available at: www.ecy.wa.gov/programs/tcp/regs/ust/2012/proposal.html.

Ecology held four public hearings on the proposed rule amendments, during which the public could ask questions and provide oral testimony:

1. Department of Ecology
   Eastern Regional Office
   4601 North Monroe Street
   Spokane, WA 99205
   April 24, 2012 at 1:30 pm

2. Department of Ecology
   Central Regional Office
   15 W Yakima Avenue
   Yakima, WA 98902
   April 25, 2012 at 1:30 pm

3. Department of Ecology
   Northwest Regional Office
   3190 160th Avenue SE
   Bellevue, WA 98008
   April 26, 2012 at 1:30

4. Department of Ecology
   Headquarters Office
   300 Desmond Drive SE
   Lacey, WA 98503
   April 27, 2012 at 1:30

In total, 26 people attended and one person provided oral testimony at the public hearings.

Ecology accepted comments on the rule proposal between March 21, 2012 and May 4, 2012 (for 44 days). Comments were received in writing and transcribed from oral testimony provided at the public hearings. In total, 19 individuals or organizations submitted comments on the proposed rule amendments. Ecology has identified a total of 68 separate comments.

1.5 Differences between Proposed and Adopted Rule Amendments

The Administrative Procedure Act requires Ecology to describe the differences between the text of the proposed rule as published in the *Washington State Register* and the text of the rule as adopted, other than editing changes, stating the reasons for the differences (RCW 34.05.325(6)(a)(ii)).

There are some differences between the proposed rule amendments filed on March 21, 2012, and the adopted rule amendments filed on August 8, 2012. Ecology made these changes for all or some of the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

The changes Ecology made to the text of the proposed rule amendments, including all deletions and additions, are identified in Appendix D to this document. The changes (other than editing) and Ecology's reasons for making them are summarized below.

1. WAC 173-360-120: Changed the definition of the term "facility compliance tag."

   Reason: To clarify the relationship between facility compliance tags and UST facilities. Each facility is identified by a unique tag. The change is based on public comment.

2. WAC 173-360-120: Changed the definition of the term "temporarily closed UST system."

   Reason: To clarify and reflect the fact that temporarily closed UST systems must in the future either be returned to service, undergo a change-in-service, or be permanently closed. The change is based on public comment.

3. WAC 173-360-730(1): Changed provision to allow Class A and Class B operators to also be trained by UST owners and operators approved by the department.

   Reason: To meet the intent of the authorizing statute (which requires Ecology to establish rules that are at least as stringent as federal requirements) using the least burdensome alternative to achieve statutory goals. EPA originally interpreted the federal requirements to not allow this option. However, EPA subsequently determined that this option is allowed, provided states have quality assurance mechanisms (such as approval and auditing processes) to ensure compliance. The change is based on public comment.

4. WAC 173-360-730(2)(a) and 173-360-730(4)(b): Clarified that Class A and Class B operators must be trained before they are allowed to train Class C operators.

   Reason: To meet the intent of the authorizing statute, which requires Ecology to establish rules that are at least as stringent as federal requirements. Under those requirements, Class A and Class B operators are not allowed to train Class C operators before they are trained themselves. The change is based on discussions with EPA.

5. WAC 173-360-730(2)(b): Eliminated proposed requirements that Class C operator training be facility-specific and include written instructions.

   Reason: To meet the intent of the authorizing statute (which requires Ecology to establish rules that are at least as stringent as federal requirements) using the least burdensome alternative to achieve statutory goals. Under the federal requirements, Class C operator training does not need to be facility-specific. Based on public comments, recent experience managing an operator training program, and further consultations with other states and EPA, Ecology determined that the benefits of facility-specific training are outweighed by the burdens imposed on UST owners and operators. This issue is related to the issue of whether Class C operators should be retrained when they move to another facility, which is discussed below.

6. WAC 173-360-730(4): With respect to acceptance of training completed before the effective date of the rule amendments, specified that the date is October 1, 2012.

Reason: To clarify the effective date of the adopted rule amendments. At the time the rule amendments were proposed, the date was not known. The date was set to allow enough time to notify affected persons of the rule amendments.

7. WAC 173-360-740 and 173-360-730(4)(b): Eliminated proposed retraining requirements for Class C operators.

Reason: To meet the intent of the authorizing statute (which requires Ecology to establish rules that are at least as stringent as federal requirements) using the least burdensome alternative to achieve statutory goals. Under the federal requirements, Class C operators do not need to be retrained. Based on public comments, information regarding the turnover rate of Class C operators, and discussions with EPA, Ecology determined that the benefits of retraining are outweighed by the burdens imposed on UST owners and operators. This issue is related to the issue of whether Class C operator training should be facility-specific, which is discussed above.

8. WAC 173-360-760(2): Eliminated proposed requirement that a Class A or Class B operator must sign Class C operator training certificates regardless of whether they provided the training. They only need to sign the certificates if they provided the training.

Reason: This requirement is no longer necessary based on Ecology's decision above to not require that Class C operator training be facility-specific.

9. WAC 173-360-810(1) and 173-360-820(1) and (2): Changed effective date of secondary containment requirements for tanks and piping from July 1, 2007 (which is the date specified in the authorizing statute), to October 1, 2012 (which is the effective date of the rule amendments). Only tanks and piping installed or replaced after that date must meet the requirements.

Reason: To meet the intent of the authorizing statute, Chapter 90.76 RCW, as amended by Chapter 147, Laws of 2007. To do this, Ecology had to resolve conflicting legislative directives. On the one hand, the Legislature directed Ecology to adopt rules requiring secondary and under-dispenser containment after July 1, 2007; on the other hand, the statutory requirement is prospective only and does not require previously installed equipment to be upgraded (RCW 90.76.020 (1)(h)). Given that the Legislature did not direct Ecology to make the requirements apply retroactively, Ecology decided to reconcile the conflicting directives by making the requirements apply only prospectively from the effective date of the rule amendments (October 1, 2012). The change is based in part on public comment.

10. WAC 173-360-820(4): Specified the types of suction piping requiring interstitial monitoring.

Reason: To clarify (restate) in subsection (4) of WAC 173-360-820 what types of suction piping require interstitial monitoring. The applicability of the requirement is already specified in subsection (1).

11. WAC 173-360-830(1): Specified more explicitly that the under-dispenser containment requirements apply only to UST systems connected to a dispenser.

    Reason: To clarify that the under-dispenser containment requirements apply only to UST systems connected to a dispenser. The change is based on public comment.

12. WAC 173-360-830(1): Changed effective date of the under-dispenser containment requirements from July 1, 2007 (which is the date specified in the authorizing statute), to October 1, 2012 (which is the effective date of the rule). Containment is only required if the dispenser, dispenser system, or underground piping connected to the dispenser system is installed or replaced after that date.

    Reason: To meet the intent of the authorizing statute, Chapter 90.76 RCW, as amended by Chapter 147, Laws of 2007. To do this, Ecology had to resolve conflicting legislative directives. On the one hand, the Legislature directed Ecology to adopt rules requiring secondary and under-dispenser containment after July 1, 2007; on the other hand, the statutory requirement is prospective only and does not require previously installed equipment to be upgraded (RCW 90.76.020 (1)(h)). Given that the Legislature did not direct Ecology to make the requirements apply retroactively, Ecology decided to reconcile the conflicting directives by making the requirements apply only prospectively from the effective date of the rule amendments (October 1, 2012). The change is based in part on public comment.

For additional explanation of these changes, please refer to Ecology's response to comments in the following chapters of this document.

1.6 Organization and Format of this Document

This Concise Explanatory Statement is organized into six chapters. Chapter 2 identifies the scope of the rule making and the basis for suspending part of the rule making, and then responds to comments on the scope. Each of the remaining four chapters covers a different part of the adopted rule amendments:

- Chapter 3 – Delivery Prohibition
- Chapter 4 – Operator Training
- Chapter 5 – Secondary Containment
- Chapter 6 – Under-Dispenser Containment

Each of those chapters is broken into three sections:

- Section 1 – Basis for Rules
- Section 2 – Overview of Rules
- Section 3 – Response to Comments

This document responds to the identified comments in a question and answer format. Ecology reviewed the public comments and grouped them into a series of questions (the "issues"). Each of the questions reflects a particular issue or set of issues raised by one or more individuals or organizations. Following each question, Ecology identifies the commenter(s) who raised the issues and the rule section(s) to which the question applies. Ecology then provides a response.

This document includes the following four appendices:

- Appendix A – Commenter Index

  This appendix includes a complete list of the individuals or organizations who provided comments on the proposed rule amendments and where in this document you can find Ecology's response to the comments.

- Appendix B – Copy of Written Comments

  This appendix includes a copy of all written comments received by Ecology on the proposed rule amendments.

- Appendix C – Transcripts of Public Hearings

  This appendix includes a complete transcript of each of the four public hearings, including any testimony provided during those hearings.

- Appendix D – Differences between Proposed and Adopted Rule Language

  This appendix includes a complete text of the proposed rule amendments with the changes tracked. The changes are identified by a line in the left margin.

Chapter 2: Scope of Rule Making

This chapter identifies the scope of the final rule making (Section 2.1), describes the earlier suspension of parts of the original rule-making (Section 2.2), and responds to public comments on the scope of the rule making and issues beyond the scope of the rule making (Section 2.3).

2.1 Overview

The adopted rule amendments:

- Authorize Ecology to stop regulated substances from being delivered to UST systems that do not comply with regulatory requirements.
- Establish an operator training program for individuals who operate and maintain UST systems. Current operators must be trained by December 31, 2012.
- Require secondary containment of tanks and pipes installed or replaced after October 1, 2012.
- Require containment under dispenser systems if the dispenser, dispenser system, or underground piping connected to the dispenser system is installed or replaced after October 1, 2012.

The basis and a more detailed overview of each of these amendments are provided in the following chapters of this document.

2.2 Partial Suspension

In November 2010, Governor Gregoire signed Executive Order 10-06, directing state agencies that report to her to suspend non-critical rule making through the end of 2011. The Governor subsequently issued Executive Order 11-03, extending the suspension through the end of 2012. The Executive Orders are available at: www.governor.wa.gov/execorders/. Ecology evaluated the UST rule making in accordance with those Orders. Based on that evaluation, Ecology decided to continue with some parts of the rule making while suspending other parts.

What parts of the rule making were continued?

Ecology continued rule making to address topics necessary to comply with the federal requirements in the Underground Storage Tank Compliance Act of 2005. Those topics are identified above in Section 2.1. This part of the rule making meets the Governor's Executive Order (11-03) exemption criteria 3(a) (required by federal or state law or required to maintain federally delegated or authorized programs).

What parts of the rule making were suspended?

Ecology originally planned to address other topics in the rule making in response to proposed changes to the federal UST rule (EPA, 2011). When Ecology began the rule-making process, we expected that EPA would complete revisions to the federal UST rule well before we needed to file our rule proposal to meet deadlines under the Underground Storage Tank Compliance Act of 2005. However, that did not happen. Consequently, Ecology decided to suspend rule making on

the following topics because they no longer met the Governor's Executive Order (11-03) exemption criteria:

- Topics being addressed in the federal rule making that are not required under the Act (EPA, 2011).
- Financial responsibility, which was considered by EPA, but is not currently being addressed in the federal rule making (EPA, 2011 and 2011c).

For more information about the rule-making suspension, visit: http://www.ecy.wa.gov/laws-rules/suspension_update.html.

2.3 Response to Comments

Several comments were received regarding the scope of the rule making and issues that are beyond the scope of the rule making. Ecology reviewed the comments and grouped them into a series of questions (the "issues"). Each of the questions reflects a particular issue or set of issues raised by one or more individuals or organizations. Following each question, Ecology identifies the commenters who raised the issues. Ecology then provides a response. Copies of written comments are included in Appendix B.

Issue 2-1: What is the purpose and scope of this rule making?

- Commenter: Patty Senecal (#14)

Response: As discussed in Section 1.3, the purpose of this rule making is to implement changes to the state's UST program specified by the Legislature in 2007 in Substitute Senate Bill 5475, which amended chapter 90.76 RCW. Those changes are necessary to:

- Comply with the new federal requirements in the Underground Storage Tank Compliance Act of 2005 (42 U.S.C. Sec. 15801 et seq., Energy Policy Act of 2005, P.L. 109-58, Title XV, subtitle B).
- Reduce the number and severity of releases of petroleum and other hazardous substances from UST systems, which pose a serious threat to human health and the environment, including drinking water.

The adopted rule amendments:

- Authorize Ecology to stop regulated substances from being delivered to UST systems that do not comply with regulatory requirements.
- Establish an operator training program for individuals who operate and maintain UST systems. Current operators must be trained by December 31, 2012.
- Require secondary containment of tanks and pipes installed or replaced after October 1, 2012.
- Require containment under dispenser systems if the dispenser, dispenser system, or underground piping connected to the dispenser system is installed or replaced after October 1, 2012.

The basis and an overview of each of these amendments are provided in the following chapters of this document.

Issue 2-2: What parts of the rule making were suspended?

- Commenter: Patty Senecal (#14)

Response: As discussed in Section 2.2, Ecology suspended the following parts of the original rule making under Executive Order 11-3:

- Topics being addressed in a concurrent federal rule making that are not required under the federal Underground Storage Tank Compliance Act of 2005. The topics include the regulation of previously deferred UST systems and the operation and maintenance of UST systems (EPA, 2011).
- Financial responsibility, which was considered by EPA, but is not currently being addressed in the federal rule making (EPA, 2011 and 2011c).

For more information about the rule making suspension, visit: www.ecy.wa.gov/laws-rules/suspension_update.html.

Prior to the suspension, Ecology was in the process of rewriting the rule to incorporate those additional changes and to improve its readability. Preliminary drafts of several parts of the rule had been distributed for informal public review and comment in October 2010. We were drafting the remaining parts when we decided to partially suspend the rule making.

Issue 2-3: When does Ecology anticipate moving forward with the suspended parts of the rule making?

- Commenter: Patty Senecal (#14)

Response: Ecology does not anticipate moving forward with the parts of the rule making that were suspended until after the federal rule making is completed. States will have three years after the adoption of the federal rule amendments to update their own rules to comply with the new federal requirements (EPA, 2011). EPA has stated that the federal rule making process will be completed no sooner than May 2013, and may take longer.

Issue 2-4: Will the public have an opportunity to comment on the suspended parts of the rule making before they are adopted?

- Commenter: Patty Senecal (#14)

Response: Yes

As required under the Administrative Procedure Act, the public will have an opportunity to comment on those parts of the rule making that were suspended before they are adopted (RCW 34.05.320 and 34.05.325). In fact, Ecology will need to start another rule-making process to make those changes. That process will likely include early outreach to stakeholders and an opportunity to review preliminary drafts before Ecology files a proposed rule for formal public comment.

Issue 2-5: Should Ecology adopt the proposed rule amendments?

- Commenters: Shaun Hubbard (#1), Sheryl Herauf (#4), Normon Bolton (#7), and John S. Fujii (#9)

Response: Yes

Two commenters (Shaun Hubbard and John S. Fujii) expressed support for the rule amendments, noting that they are necessary to prevent releases from UST systems that could impact human health and adjacent property owners. Two other commenters (Sheryl Herauf and Normon Bolton) objected to the adoption of the rule amendments, expressing concerns about the potential compliance costs, particularly given the current state of the economy.

As discussed in Section 1.3, the rule amendments are necessary to implement changes to the state's UST program specified by the Legislature in 2007 in Substitute Senate Bill 5475, which amended chapter 90.76 RCW. Those changes are necessary to:

- Comply with the new federal requirements in the Underground Storage Tank Compliance Act of 2005 (42 U.S.C. Sec. 15801 et seq., Energy Policy Act of 2005, P.L. 109-58, Title XV, subtitle B).
- Reduce the number and severity of releases of petroleum and other hazardous substances from UST systems, which pose a serious threat to human health and the environment, including drinking water.

As discussed in Section 2.2, Ecology already suspended several non-critical parts of the rule making under Executive Order 11-03. In that Order, Governor Gregoire recognized that "the current recession is causing severe economic stress for small businesses and governments" and that "a stable and predictable regulatory and policy environment will conserve resources for small businesses and local governments and promote economic recovery."

However, the Governor also recognized in the Order that some rule makings are critical, and so directed the Office of Financial Management "to publish guidelines identifying circumstances in which rule making may proceed." Based on those guidelines, Ecology decided to proceed with those parts of the rule making necessary to comply with the federal requirements in the Underground Storage Tank Compliance Act of 2005.

As required under the Administrative Procedure Act (RCW 34.05.328), Ecology conducted a cost-benefit analysis of the adopted rule amendments and concluded that the estimated benefits of the adopted rule amendments exceed their costs (Ecology, 2012). That analysis included an evaluation of the cost of complying with the following requirements:

- Operator training.
- Secondary containment.
- Under-dispenser containment.

The applicability of the requirements is important. In particular, secondary and under-dispenser containment requirements apply only to new equipment. Existing equipment does not need to

replaced or upgraded. That reduces the impact of the requirements. And many existing UST systems already meet the new requirements, including those owned by Mr. Bolton.

As required under the Regulatory Fairness Act (RCW 19.85.070), Ecology also evaluated the impacts of the rule on small businesses and identified measures to mitigate those impacts where it was legal and feasible to do so (Ecology, 2012a).

Issue 2-6: Should the scope of the rule making be expanded to address other issues?

- Commenters: Rob Olsen (#8), John S. Fujii (#9), Stuart Pennington (#10), and David C. Robinson (#13)

Response: No

Several commenters requested that Ecology address issues that are beyond the scope of the rule making, which is identified in Section 2.1. The issues and the commenters who raised them are identified in the following table.

Commenter	Affiliation	Issue
Rob Olsen	Tacoma-Pierce County Health Department	Should Ecology prohibit installation of new observation wells and require decommissioning of existing observation wells that do not meet constructions standards?
		Should Ecology require cleanup of releases at UST facilities prior to allowing installation of new UST systems or upgrades to existing UST systems at those facilities?
		Should Ecology impose requirements governing the characterization of pea gravel used as a backfill material?
John S. Fujii	North MountView LLC	Should Ecology impose deadlines and stricter requirements for the investigation and cleanup of releases from UST systems?
Stuart Pennington		Should Ecology require training of operators of above-ground storage tank systems?
David C. Robinson	Naval Facilities Engineering Command Northwest	Should Ecology require that automatic line leak detectors for pressurized piping be able to shut down pumps if the transfer of regulated substances is automated (such as for carrying product to an emergency power generator)?

Ecology decided not to address these issues in the rule making because its scope is limited by the Governor's Executive Order 11-03. As explained in Section 2.2, the Order required Ecology to suspend non-critical parts of the rule making. The issues raised by the commenters are beyond the scope allowed under that Order.

Mr. Pennington's issue about training operators of above-ground storage tank systems is also beyond the scope of Ecology's rule-making authority under Chapter 90.76 RCW. Ecology does not currently have the statutory authority to regulate such systems.

In response to Mr. Fujii's issue about the need for prompt and diligent investigation and cleanup of releases from UST systems, note that UST owners and operators are currently required to:

- Report suspected releases (WAC 173-360-360).
- Confirm suspected releases (WAC 173-360-370).

- Conduct site assessments upon the permanent closure or change-in-service of an UST system (WAC 173-360-390).
- Report confirmed releases (WAC 173-360-372).
- Investigate and clean up confirmed releases (WAC 173-360-399 and 173-340-450).

However, there are currently no deadlines for completing remedial investigations or cleanups of releases from UST systems in WAC 173-340-450. For this and other reasons (including the lack of funds to pay for cleanups), only about 25% of known contaminated sites have been successfully cleaned up, either voluntarily or under an order.

In response to this problem, Ecology was working on changes to WAC 173-340-450 as part of a separate rule making process. Those changes would have streamlined the process for responding to releases from UST systems and established enforceable deadlines for completing remedial investigations and starting cleanups. However, that rule making was also suspended under Governor's Executive Orders 10-06 and 11-03. More information about that rule making is available at: www.ecy.wa.gov/programs/tcp/regs/2011RuleMaking/MTCA-on-hold.html.

Chapter 3: Delivery Prohibition

This chapter provides a concise explanatory statement for the rule amendments governing delivery prohibition. The chapter identifies the basis for the adopted rules (Section 3.1), provides an overview of the rules (Section 3.2), and responds to public comments on the proposed rules (Section 3.3).

3.1 Basis for Rules

Statutory Authority

In Chapter 90.76 RCW, the Legislature:

- Authorizes Ecology to prohibit delivery of regulated substances to UST systems or facilities that are not in compliance with regulatory requirements.
- Prohibits persons from delivering, depositing, or accepting regulated substances into UST systems or facilities determined by Ecology to be ineligible.
- Directs Ecology to establish an enforcement program and adopt rules for delivery prohibition that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005.

See RCW 90.76.020(3) through (6), and RCW 90.76.050.

Federal Requirements

Under the UST Compliance Act of 2005, EPA was required to publish guidelines for states that specify the processes and procedures necessary for delivery prohibition (42 U.S.C. Sec. 6991k(a)(2)). Those guidelines are published in the following document:

> US Environmental Protection Agency (EPA), 2006. Grant Guidelines to States for Implementing the Delivery Prohibition Provision of the Energy Policy Act of 2005. Office of Underground Storage Tanks. EPA-510-R-06-003. www.epa.gov/swerust1/fedlaws/Delivery%20Prohibition_080706.pdf.

States receiving federal funding must, at a minimum, comply with the processes and procedures in the guidelines (42 U.S.C. Sec. 6991k(a)(3); EPA, 2006, p. 1).

3.2 Overview of Rules

The rule amendments governing delivery prohibition are set forth in WAC 173-360-160 and 173-360-165. The rules:

- Establish Ecology's authority to prohibit delivery of regulated substances to non-compliant UST systems or facilities (Sections 160(1)(d) and 165(1)).
- Require Ecology's enforcement procedures to be consistent with and no less stringent than those required under federal law (Section 165(2)).
- Specify the means by which ineligible UST systems and facilities are identified (affixing red tags to systems and revoking facility compliance tags) (Section 165(3)).

- Prohibit persons from delivering, depositing, or accepting regulated substances into ineligible UST systems or facilities without the prior written authorization of Ecology (Section 165(4)).
- Prohibit persons from withdrawing waste oil from ineligible UST systems without the written authorization of Ecology (Section 165(5)).
- Prohibit persons from removing or altering a red tag without the prior written authorization of the department (Section 165(6)).

The following new terms used in the rules are defined in WAC 173-360-120:

- Facility compliance tag.
- Product deliverer.
- Red tag.

3.3 Response to Comments

Several comments were received on the rule governing delivery prohibition and the related prohibition on waste oil withdrawal. Ecology reviewed the comments and grouped them into a series of questions (the "issues"). Each of the questions reflects a particular issue or set of issues raised by one or more individuals or organizations. Following each question, Ecology identifies the commenters who raised the issues and the rule sections to which the question applies. Ecology then provides a response. Copies of written comments are included in Appendix B of this document.

Issue 3-1: Should Ecology be able to prohibit delivery to the entire UST facility where a non-compliant UST system is located?

- Commenters: Chester Benson (#12), David C. Robinson (#13), and Robert M. Shirley (#15)
- Rule Section: WAC 173-360-165(1)

Response: Yes

One commenter (Chester Benson) noted that Ecology's ability to prohibit delivery to non-compliant UST facilities is a necessary tool for ensuring compliance. However, two commenters representing the Department of Defense (DoD), Mr. Robinson and Mr. Shirley, expressed serious concerns about the impact of prohibiting delivery to DoD facilities, noting that such prohibitions could impair the important national security functions of those facilities and might even pose greater environmental or other risks to the public. They stated that Ecology should only be able to prohibit delivery to non-compliant UST systems, not the entire UST facility where those systems are located. Ecology disagrees.

First, the authorizing statute provides Ecology the authority to prohibit delivery of regulated substances to either non-compliant UST systems or the UST facilities where those systems are located (RCW 90.76.020(3)(f), (4) through (6), and 90.76.050).

- Green Tag Program: Originally, the Legislature provided Ecology the authority to prohibit delivery of regulated substances to non-compliant UST facilities. This may be

done by revoking either the facility's license or its compliance tag (RCW 90.76.020(4) and (5)). This type of program is often referred to as a "green tag" program.

- Red Tag Program: To comply with the new federal requirements in Underground Storage Tank Compliance Act of 2005, the Legislature amended the authorizing statute in 2007 to also provide Ecology the authority to prohibit delivery of regulated substances to just the non-compliant UST systems (RCW 90.76.020(3)(f) and (6)). This type of program is often referred to as a "red tag" program.

Ecology's additional authority provides it with greater flexibility: instead of prohibiting delivery to an entire UST facility, Ecology can now prohibit delivery to just the UST systems at the facility that are out of compliance.

Second, the language of the new delivery prohibition section (WAC 173-360-165) does not create a mandatory duty on Ecology to prohibit delivery to an entire UST facility. Rather, the language in that new section merely provides Ecology with the discretion to prohibit delivery to an UST system or an entire UST facility where a system is located.

Third, Ecology is currently developing an enforcement policy that will describe how it will exercise its delivery prohibition authority, including under what circumstances it is necessary or appropriate to prohibit delivery to an UST system or facility. The policies must be consistent with and no less stringent than those required by section 9012 of the Solid Waste Disposal Act (42 U.S.C. Sec. 6991k), including the guidelines published by EPA under that Act (WAC 173-360-165(2)).

Fourth, Ecology believes the commenters' concerns that Ecology will inappropriately prohibit delivery of regulated substances to an UST facility are unfounded. Ecology rarely revokes the compliance tag of an UST facility. In fact, based on data in the Ecology UST database, only 25 facility compliance tags have ever been revoked by Ecology. And Ecology has never revoked the compliance tag of an UST facility located within a DoD installation (Ecology, 2012b).

Fifth, Ecology also believes the commenters' concerns regarding the potential impact of prohibiting delivery to an UST facility are likewise unfounded. DoD installations usually contain multiple UST facilities. For example, Joint Base Lewis-McChord has 23 separate UST facilities, each with its own facility compliance tag. Similarly, NBK Bangor and NAS Whidbey Island have 37 and 15 UST facilities respectively (Ecology, 2012b). Therefore, even if Ecology prohibited delivery of regulated substances to an UST facility at the Base, the prohibition would not apply to all of the UST systems located at the Base.

Issue 3-2: Should federal facilities be exempt from delivery prohibition?

- Commenters: David C. Robinson (#13)
- Rule Section: WAC 173-360-165(1)

Response: No

The commenter requested that Ecology exempt federal facilities from delivery prohibition due to the potential impacts on federal facilities. Ecology does not have the authority to grant the

request and does not believe an exemption would be appropriate. Therefore, the request is denied.

As explained in Section 3.1 above, the Legislature directed Ecology to establish an enforcement program and adopt rules for delivery prohibition that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005. Under that Act, Ecology must, at a minimum, comply with the processes and procedures in the federal grant guidelines published by EPA (42 U.S.C. Sec. 6991k(a)(3); EPA, 2006, p. 1). The guidelines specify when delivery prohibition is mandatory and allows exceptions "based on whether the prohibition is in the best interest of the public" (EPA, 2006, p. 4). However, the guidelines do not allow Ecology to categorically exempt UST facilities at DoD installations. Also, under federal law, agencies of the federal government are subject to, and must comply with, all federal and state requirements governing USTs to the same extent, and in the same manner, as any other person (42 U.S.C. 6991f(a)). Furthermore, categorical exemptions are not necessary given that Ecology retains the discretion under the guidelines to allow delivery to non-compliant UST systems on a case-specific basis if doing so is "in the best interest of the public."

Issue 3-3: May Ecology allow deliveries to non-compliant UST systems at federal facilities if doing so is in the best interest of the public?

- Commenter: Robert M. Shirley (#15)
- Rule Section: WAC 173-360-165(1)

Response: Yes

As explained in Section 3.1, states receiving federal funding must, at a minimum, comply with the processes and procedures in the guidelines published by EPA (42 U.S.C. Sec. 6991k(a)(3); EPA, 2006, p. 1). Under those guidelines, Ecology is only required to prohibit delivery to UST systems if the following required equipment is not installed:

- Spill prevention equipment;
- Overfill prevention equipment;
- Leak detection equipment; or
- Corrosion protection equipment (EPA, 2006, p. 4).

Given the maturity of the UST compliance program, Ecology does not expect to find many, if any, operational UST systems without such equipment. However, as noted by the commenter, if an UST system does not have such equipment, Ecology retains the discretion under the guidelines to continue to allow delivery if the operation of the system is "in the best interest of the public" (EPA, 2006, p. 4).

Ecology chose not to address in the rule how it will exercise its statutory delivery prohibition authority. Instead, Ecology is developing an enforcement policy that will identify circumstances where it would be "in the best interest of the public" to continue to allow delivery. Ecology does not intend on prohibiting delivery when such a prohibition would threaten national security or cause greater environmental harm or risk to the public.

Issue 3-4: Should Ecology stay the effectiveness of orders until appeals are resolved?

- Commenter: Robert M. Shirley (#15)
- Rule Section: WAC 173-360-160(3)

Response: No

The commenter requested that Ecology stay the effectiveness of an order until the appeal of the order is resolved, arguing that military operations at federal facilities might otherwise be severely impacted. Ecology disagrees and is denying the request.

First, as discussed under Issue 3-3 above, Ecology has the authority under the law to allow deliveries of regulated substances to non-compliant UST systems if allowing such deliveries were determined by Ecology to be "in the best interest of the public" (EPA, 2006, p. 4). Ecology does not intend on prohibiting delivery when doing so would threaten national security or cause greater environmental harm or risk to the public.

Second, appellants have adequate recourse under the law. Appellants may obtain a stay of the effectiveness of an order by including such a request in the appeal document (RCW 43.21B. 320(2)). If the application for a stay is denied, the hearings board shall expedite the hearing and decision on the merits (RCW 43.21B.320(4)). Any person aggrieved by the denial of a stay may petition the Superior Court for Thurston County for review of that decision pursuant to Chapter 34.05 RCW pending the appeal on the merits before the board. The Superior Court shall expedite its review of the decision of the hearings board (RCW 43.21B.320(5)).

Issue 3-5: Should Ecology prohibit withdrawals of waste oil from non-compliant UST systems?

- Commenter: Thomas Beam (#18)
- Rule Section: WAC 173-360-165(5)

Response: Yes

The commenter is concerned that such a prohibition could increase the risk to the environment if there are leaks from the UST system, and therefore recommends eliminating the prohibition. Ecology disagrees.

First, Ecology already has the authority under the current rule to prohibit withdrawals of waste oil from non-compliant UST systems (WAC 173-130(5)). That authority is necessary to:

- Identify unregistered waste oil UST systems. Owners of such systems are not always aware that such systems are regulated and must be registered.
- Ensure compliance with orders prohibiting the continued deposit of waste oil into non-compliant UST systems.

Second, the prohibition would only pose a risk to the environment if the UST system is leaking. But in those cases, Ecology will not only prohibit the continued deposit of waste oil into the

system, but also require the withdrawal of any remaining waste oil from the system. Under the amended rule, such withdrawals are allowed with Ecology's prior written authorization (WAC 173-360-165(5)).

Issue 3-6: Should certain types of UST systems be exempt from the prohibition on waste oil withdrawal?

- Commenters: Scott Tomren (#5), David C. Robinson (#13), and Robert M. Shirley (#15)
- Rule Section: WAC 173-360-165(5)

Response: No

The commenters identified several circumstances where they believed UST systems should be exempt from the prohibition on waste oil withdrawal, including:

- Leaking UST systems (Mr. Tomren)
- Abandoned UST systems (Mr. Tomren).
- UST systems collecting waste oil from oil/water separators (Mr. Robinson and Mr. Shirley).

They argue that prohibiting withdrawal from such systems could pose greater risks to human health and the environment. While Ecology agrees there is a risk to prohibiting withdrawals in these circumstances, Ecology does not believe that a categorical exemption is appropriate. An exemption would allow withdrawals without notification of Ecology. As explained under Issue 3-5 above, such notification is necessary to ensure compliance with regulatory requirements.

Ecology chose a different approach that addresses both concerns. Under the adopted rule, withdrawals are allowed with Ecology's prior written authorization. This approach ensures that Ecology is notified and allows withdrawals when appropriate or necessary.

Issue 3-7: Should the term "UST facility" be defined?

- Commenters: David C. Robinson (#13) and Thomas Beam (#18)
- Rule Section: WAC 173-360-120

Response: No

The commenters requested that Ecology either define the term "UST facility" or use the already defined term "UST site" in place of that term. Ecology has decided to do neither for the following reasons:

- The term "UST facility" is the appropriate term, not "UST site." The authorizing statute used the terms "facility" and "facility compliance tag," defining only the latter term.
- The current rules uses both the term "facility" and "UST site," defining only the latter term. Given the limited scope of this rule making, we decided that it would be inappropriate to define terms that might impact parts of the rule that have not been amended.

- Before the partial suspension of the rule making, Ecology planned on eliminating the term "UST site" and using the term "UST facility," as appropriate, throughout the rule. Ecology still intends on making those changes in the future and so wants to be consistent with that intent.
- The use of the term "facility" has not been a problem.

However, in response to the comments, Ecology has decided to add the following sentence to the definition of "facility compliance tag" to help clarify the relationship between facilities and tags:

> "Each UST facility is identified by a facility compliance tag."

This clarification may help address an underlying concern of the commenters: that Ecology may prohibit delivery to all UST systems at a military base (such as Joint Base Lewis-McChord) if any single system at that base is non-compliant. As explained under Issue 3-1 above, military bases usually contain several, discrete UST facilities, each with its own facility compliance tag (number). Ecology's database identifies which UST systems are associated with each UST facility and compliance tag.

Chapter 4: Operator Training

This chapter provides a concise explanatory statement for the rule amendments governing operator training. The chapter identifies the basis for the adopted rules (Section 4.1), provides an overview of the rules (Section 4.2), and responds to public comments on the proposed rules (Section 4.3).

4.1 Basis for Rules

Statutory Authority

In Chapter 90.76 RCW, the Legislature directs Ecology to establish an operator training program and adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005. See RCW 90.76.020(1) and (3)(e).

Federal Requirements

Under the UST Compliance Act of 2005, EPA was required to publish guidelines specifying minimum training requirements for three classes of operators (42 U.S.C. Sec. 6991i(a)). The guidelines are published in the following document:

> US Environmental Protection Agency (EPA), 2007. Grant Guidelines to States for Implementing the Operator Training Provision of the Energy Policy Act of 2005. Office of Underground Storage Tanks. EPA-510-R-07-005. www.epa.gov/swerust1/fedlaws/otgg_final080807.pdf.

States receiving federal funding are required to develop state-specific training requirements that are consistent with the guidelines (42 U.S.C. Sec. 6991i(b); EPA, 2007, p. 2).

4.2 Overview of Rules

The rules establish a mandatory operator training program for three distinct classes of individuals who operate UST systems:

- Class A operators, who have primary responsibility for the operation and maintenance of UST systems.
- Class B operators, who have control of, or responsibility for, the day-to-day operation and maintenance of UST systems.
- Class C operators, who are responsible for initially responding to alarms or other indications of emergencies caused by spills, overfills, leaks, or releases from UST systems.

The rules governing operator training are set forth in Part 7 of Chapter 173-360 WAC. In summary, the rules specify:

- Who must be designated and trained as Class A, Class B, and Class C operators (Section 710).

- By when must designated operators be trained (Section 720). Operators must be initially designated and trained by December 31, 2012.
- Training requirements for all classes of operators, including who may provide the training and what subjects the training must cover (Section 730).
- Retraining requirements for Class A and Class B operators, including when retraining is necessary and by when such training must be completed (Section 740).
- Requirements for operation and maintenance plans, including when plans are necessary and what the plans must contain (Section 745).
- When UST facilities must be manned by trained operators (Section 750(1)).
- What type of emergency signage is required at UST facilities (Section 750(2)).
- Recordkeeping requirements, including what documentation of designated operators and their training must be maintained and for how long (Section 760).

The following new terms used in Part 7 are defined in WAC 173-360-120:

- Change-in-service.
- Class A operator.
- Class B operator.
- Class C operator.
- Temporarily closed UST system.

4.3 Response to Comments

Several comments were received on the rules governing operator training. Ecology reviewed the comments and grouped them into a series of questions (the "issues"). Each of the questions reflects a particular issue or set of issues raised by one or more individuals or organizations. Following each question, Ecology identifies the commenters who raised the issues and the rule sections to which the question applies. Ecology then provides a response. Copies of written comments and transcripts of oral testimony are included, respectively, in Appendix B and Appendix C of this document.

Issue 4-1: Does the term "operator" include all Class A, Class B, and Class C operators?

- Commenter: Robert M. Shirley (#15)
- Rule Section: WAC 173-360-120

Response: No

Under chapter 173-360 WAC, owners and operators of UST systems are responsible for ensuring compliance with regulatory requirements and for performing specified actions. The terms "owner" and "operator" are terms of art that are defined in the rule. "Operator" means "any person in control of, or having responsibility for, the daily operation of the UST system" (WAC 173-360-120).

The commenter requested that Ecology clarify whether every individual designated as a Class A, Class B, or Class C operator is an "operator," as defined in the rule. In particular, the commenter

was concerned whether individuals designated as Class C operators were responsible, and would be held accountable, for ensuring compliance and undertaking specified actions.

First, and most importantly, for an individual to be considered an "operator," the individual must meet the definition of the term. The mere fact that an individual is designated as a Class A, Class B, or Class C operator is not sufficient to classify the individual as an "operator."

Second, Ecology decided not to define the relationship between the terms in the rule because we want the rule to be sufficiently flexible to accommodate various business and ownership structures. Ecology expects, though, that in most cases:

- "Class A operators" are "owners";
- "Class B operators" are "operators" and
- "Class C operators" are neither "owners" nor "operators."

However, Ecology recognizes that those relationships may not always be true. For example:

- An individual does not need to own an UST system to be designated as a Class A operator of that system. So, not all Class A operators are likely to be owners.
- For each UST system, only one individual needs to be designated as a Class A operator and a Class B operator. So some owners and operators may not be designated to any of the operator classes.
- Individuals may be designated to more than one operator class. So, for example, a Class C operator might be an "owner," an "operator," or both.

Issue 4-2: May "Class C operators" perform some operation and maintenance tasks?

- Commenter: Robert M. Shirley (#15)
- Rule Section: WAC 173-360-120

Response: Yes

Under Chapter 173-360 WAC, owners and operators of UST systems are responsible for ensuring compliance with regulatory requirements. Some operation and maintenance tasks, such as tightness tests and repairs, must be performed by a certified UST supervisor (WAC 173-360-600 through 173-360-670). Other tasks, though, such as manual tank gauging and periodic rectifier inspections, may be performed by anyone, including individuals designated as Class C operators. In summary, unless the rule specifies that a task must be performed by particular person (such as a certified UST supervisor), the task may be performed by anyone.

Issue 4-3: Should operator training be required when an UST facility is temporarily closed?

- Commenter: Thomas Beam (#18)
- Rule Section: WAC 173-360-700(2)

Response: Yes

In the proposed rule, Ecology required UST owners and operators to comply with the operator training requirements while an UST system is temporarily closed. Mr. Beam stated that he did not believe operator training was necessary or required under federal law while an UST system is temporarily closed. Ecology disagrees and has maintained the requirement in the adopted rule.

First, operator training is required under the authorizing statute, chapter 90.76 RCW. As explained in Section 4.1, the Legislature directed Ecology to adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005. See RCW 90.76.020(1) and (3)(e). The Act requires EPA to publish guidelines specifying minimum training requirements (42 U.S.C. Sec. 6991i(a)). The guidelines require operator training while an UST system is temporarily closed (EPA, 2007, p. 3). The Act also requires states receiving federal funding to develop a training program that is consistent with the guidelines (42 U.S.C. Sec. 6991i(b); EPA, 2007, p. 2). After receiving the comment, Ecology reconfirmed with EPA that operator training is required while an UST system is temporarily closed.

Second, Ecology believes that operator training is necessary and appropriate while UST systems are temporarily closed. Such systems continue to pose risks to human health and the environment if they have not been emptied (which is not required). Even if the systems are emptied, they must still meet all of the same regulatory requirements as an operational system (except for release detection) to ensure their continued integrity because they could be returned to service. For example, cathodic protection systems must still be periodically inspected and tested. Even if the systems are not returned to service, operators are responsible for ensuring that the systems are properly closed and the sites are properly assessed for releases.

In addition, Ecology does not believe that the operator training requirements are burdensome for UST systems that are temporarily closed. Training is only necessary in these circumstances if (1) a new operator is designated, and (2) that operator has not previously been trained. Furthermore, the rules allow an individual to be designated to multiple classes.

Issue 4-4: May a "temporarily closed UST system" undergo a change-in-service or be permanently closed instead of being returned to service?

- Commenter: Thomas Beam (#18)
- Rule Section: WAC 173-360-120

Response: Yes

In the proposed rule, Ecology defined the term "temporarily closed UST system" to mean "an UST system that has been removed from service and will be returned to service in the future." The commenter correctly pointed out that such systems may never be returned to service. Instead, they may undergo a change-in-service (meaning that the system would no longer be used to store regulated substances) or be permanently closed. As noted in Section 1.5, Ecology has changed the definition to reflect this fact. In the adopted rule, the term is defined as follows:

> "Temporarily closed UST system" means an UST system that has been removed from service and will be returned to service, undergo a change-in-service, or be permanently closed in the future.

However, Ecology would like to emphasize that temporary closure is not a substitute for permanent closure. Temporarily closed UST systems must eventually either be returned to service, undergo a change-in-service, or be permanently closed in accordance with the requirements of Chapter 173-360 WAC.

Issue 4-5: Should a limit be placed on the number of UST facilities at which a Class A or Class B operator may be designated?

- Commenter: Robert M. Shirley (#15)
- Rule Section: WAC 173-360-710

Response: No

In the proposed rule, Ecology did not place any limits on the number of UST facilities at which a Class A or Class B operator may be designated. The commenter expressed support for Ecology's decision. Ecology did not add any limits in the adopted rule.

Such limits are neither required under the federal grant guidelines (Ecology, 2007, pp.3-4) nor warranted based on a qualitative evaluation of costs and benefits. The added flexibility allows both government agencies (such as the Department of Defense) and businesses to maintain control over staffing decisions and reduce operator training costs. While such limits might improve compliance rates, Ecology does not have any data to support that. Furthermore, Ecology has other means of managing non-compliance, including requiring retraining of operators and development of operation and maintenance plans. Ecology also expects the retraining requirement to impose a natural limit on the number of UST facilities at which a Class A or Class B operator is designated.

Issue 4-6: May employees of a franchisee be designated as Class C operators?

- Commenter: Marc Westfall (#2)
- Rule Sections: WAC 173-360-710(2) and definition of "Class C operator" in WAC 173-360-120

Response: Yes

Under the proposed rule, Class C operators must be employees of the UST system owner or operator. Mr. Westfall expressed concern that this requirement did not account for the business model of several large companies like 7-Eleven, Inc., which operate UST facilities under a franchise agreement. Under this model, the franchisee is an independent operator and the employees are not directly employed by the franchisor. According to Mr. Westfall, the franchisor is the Class A and Class B operator and the franchisee is a Class C operator.

After careful consideration and consultations with EPA, Ecology has determined that the rule does not prevent employees of franchisees from being designated as Class C operators. That is because the franchisee likely meets the definition of an UST "operator," which is defined to be "any person in control of, or having responsibility for, the daily operation of the UST system" (WAC 173-360-120). The fact that the franchisee is not designated as a Class A or Class B operator, and is instead designated as a Class C operator, does not alter the fact that the franchisee meets the definition of an "operator." Therefore, franchisees may designate their

employees as Class C operators. Accordingly, Ecology has decided that the rule does not need to be changed to accommodate this business model.

Issue 4-7: Should Class A operators be trained before obtaining a license to operate an UST system?

- Commenter: Rod Smith (#6)
- Rule Section: WAC 173-360-720(2)

Response: No

In the proposed rule, Ecology required Class A operators be trained within 60 days of assuming duties of the operator class. In his comments, Mr. Smith suggested that Ecology should instead require new Class A operators be trained before obtaining a license to operate an UST system. He noted that such requirements already exist for obtaining other licenses, such as for selling alcohol and cigarettes. The rationale for the one, he argued, should apply equally to the other.

While Ecology believes Mr. Smith raises an important issue, and thinks his suggested approach is worthy of further consideration, Ecology decided not to include it in the adopted rule for the following reasons:

- Adopting such an approach might constitute a significant change to the rule that would necessitate re-filing the proposed rule for public comment. Ecology believes that other people affected by such a change would want an opportunity to comment on it before Ecology adopted it.
- Before Ecology could adopt the approach, it would need to resolve some outstanding issues, including whether the requirement should apply to the licensee, who may be a Class B operator and not a Class A operator.
- The approach would require consultations with the Department of Revenue, which manages the master licensing service, regarding how to implement such an approach. Given federal deadlines, we do not have the time currently to develop and implement such an approach.

However, Ecology plans on considering this approach again during the next rule making, which is not expected to occur until after EPA adopts changes to the federal rule.

Issue 4-8: Should Class B operators be provided more than 60 days to get trained?

- Commenter: Rod Smith (#6)
- Rule Section: WAC 173-360-720(2)

Response: No

In the proposed rule, Ecology required Class B operators be trained within 60 days of assuming duties of the operator class. In his comments, Mr. Smith requested that Ecology provide Class B operators 90 days to get trained, arguing that 60 days may not be sufficient.

Ecology decided not to change the requirement in the adopted rule for the following reasons:

- The federal grant guidelines require Class A and B operators be trained within 30 days of assuming duties of the operator class or within another reasonable period specified by the state (EPA, 2007, p.7).
- As allowed under the guidelines, Ecology decided to give Class A and Class B operators more time to get trained (60 instead of 30 days). Ecology made this decision to provide businesses more flexibility and reduce the risk of non-compliance.
- Ecology believes, though, that Class A and Class B operators should be trained as soon as possible after taking ownership or control of an UST system, if not before. While Mr. Smith believes this is more important for Class A operators (see discussion under Issue 4-8 above), Ecology believes that it is equally important for both classes. Also note that individuals can be trained before they even take on the duties of the class.

Issue 4-9: Should Class A and Class B operators be allowed to be trained in-house?

- Commenters: Marc Westfall (#2) and Thomas Beam (#18)
- Rule Section: WAC 173-360-730(1)(a)

Response: Yes

In the proposed rule, Ecology did not allow Class A and Class B operators to be trained in-house (that is, trained by UST owners and operators). Ecology did not allow in-house training for Class A and Class B operators because it was not one of the allowable options listed by EPA in the federal grant guidelines (EPA, 2007, pp. 8-9).

Both commenters requested that Ecology allow such training. Mr. Westfall noted that 7-Eleven and several other large businesses administer computer-based training internally. Mr. Beam noted that third-party training programs are primarily focused on commercial facilities and that large government facilities frequently establish internal training programs to ensure that facility-specific factors are adequately addressed.

Based on the comments, and further consultations with EPA regarding what is allowed under the federal grant guidelines, Ecology decided to revise the rule to allow Class A and Class B operators to be trained in-house. According to EPA, in-house training is allowed under the guidelines as a "comparable training approach" (EPA, 2007, p 9). However, for in-house training to be comparable, EPA requires states to implement some type of quality assurance mechanism. Accordingly, just as for third-party training programs, Ecology is requiring in-house training programs to be approved by Ecology.

Issue 4-10: Should Class C operator training be facility-specific?

- Commenter: Marc Westfall (#2)
- Rule Sections: WAC 173-360-730(2)(b), 173-360-740, and 173-360-760(2)

Response: No

In the proposed rule, Ecology required that:

- Class C operator training be facility-specific.
- Class C operators be retrained whenever they move to another UST facility.
- Class C operator training certificates be signed by a Class A or Class B operator.

The federal grant guidelines do not require Class C operator training to be facility-specific (EPA, 2007, p. 7). However, Ecology believed facility-specific training was necessary because:

- Class C operators are the UST facility's first responders, and they need to know how to quickly identify and properly respond to emergencies.
- Ecology did not believe Class C operators would be able to apply generic classroom and computer-based instruction at specific facilities without further field-based instruction.
- Ecology believed the benefit of facility-specific training outweighed the burden imposed on UST owners and operators.

Mr. Westfall requested that Ecology either eliminate the requirements or work to accommodate the existing business practices of 7-Eleven. He noted that 7-Eleven and several other large companies administer computer-based training programs for Class C operators, and that such training programs are allowed in other states. He also clarified that such programs include facility-specific worksheets that are completed by the employee and franchisee/employer.

In the adopted rule, Ecology decided to eliminate the requirements. Ecology made this decision based on public comments, our recent experience managing an operator training program, and further consultations with other states and EPA. Ecology no longer believes that the marginal benefit of facility-specific training outweighs the additional burden imposed on UST owners and operators. First, based on our experience, and that of other states, Ecology believes that Class C operators will be able to apply generic classroom and computer-based instruction at specific facilities without further field-based instruction. Second, Ecology found the requirements to be more difficult to implement and more burdensome to comply with than it had anticipated.

Issue 4-11: Should Class C operator training include an evaluation component?

- Commenter: David C. Robinson (#13)
- Rule Section: WAC 173-360-730(2)(c)

Response: Yes

In the proposed rule, Ecology required that Class C operator training include an evaluation component (such as testing or practical demonstration). Mr. Robinson commented that such evaluation was neither necessary nor required under federal law. Ecology disagrees and has maintained the requirement in the adopted rule.

First, evaluations of operator knowledge are required under the authorizing statute, chapter 90.76 RCW. As explained in Sections 4.1 above, the Legislature directed Ecology to adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005. See RCW 90.76.020(1) and (3)(e). The Act requires EPA to publish guidelines specifying minimum training requirements (42 U.S.C. Sec. 6991i(a)). The guidelines require

Class C operator training to include an evaluation component (EPA, 2007, p. 8). After receiving the comment, Ecology reconfirmed with EPA that an evaluation is required.

Second, Ecology believes that an evaluation of operator knowledge is necessary to ensure that operators are adequately trained and competent. The rule does not prescribe the method of evaluation. The rule only requires that the evaluation be able to reasonably determine whether the operator has the necessary knowledge and skills to meet the responsibilities of the class.

Issue 4-12: Should other types of training be allowed as a substitute for Class C operator training?

- Commenter: Thomas Beam (#18)
- Rule Section: WAC 173-360-730(2)

Response: No

In the proposed rule, Ecology does not allow other types of training to be used as a substitute for required Class C training. Mr. Beam requested that Ecology allow the following training programs to satisfy the requirements for Class C training:

- 24-hour or 40-hour Hazardous Waste Worker Training under 29 CFR 1910.120(e).
- Training under Chapter 296-67 WAC.
- OSHA Process Safety Management Training under 29 CFR 1910.119.
- Spill Prevention, Control and Countermeasures training under 40 CFR 112.

Ecology disagrees and decided not to make any changes in the adopted rule. Class C training is both necessary and required under federal law.

First, Class C operator training is required under the authorizing statute, chapter 90.76 RCW. As explained in Section 4.1 above, the Legislature directed Ecology to adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005. See RCW 90.76.020(1) and (3)(e). The Act requires EPA to publish guidelines specifying minimum training requirements (42 U.S.C. Sec. 6991i(a)). The guidelines require Class C operator training and specify minimum training requirements (EPA, 2007, pp. 7-9). Training programs, such as those identified by Mr. Beam, do not meet those requirements. Ecology confirmed this with EPA after receiving the comment.

Second, Ecology does not believe the training provided by these other programs ensures that Class C operators have the necessary knowledge and skills to identify and respond to emergencies at UST facilities.

Third, Ecology does not believe that complying with Class C training requirements represents a significant additional burdensome. For an average UST facility (with three Class C operators), Ecology estimated the total initial compliance cost to be $73.18, and the total ongoing annual compliance cost (based on a 119.5% turnover rate) to be $87.45 (Ecology, 2012). Ecology reduced the regulatory burden further by eliminating in the adopted rule the retraining requirements for Class C operators (see Issue 4-15 below).

Issue 4-13: Should Class A and Class B operators be retrained annually?

- Commenters: Stuart Pennington (#10), Tim Curtis (#11), Chester Benson (#12), Julia Taffee (#17), Paul Struthers (#19)
- Rule Section: WAC 173-360-740(1)

Response: No

In the proposed rule, Ecology did not require annual retraining of Class A and Class operators. However, Ecology may require Class A and Class B operators of non-compliant UST systems to be retrained. The commenters, including several training providers, recommended that Ecology require annual retraining, arguing that it is essential for ensuring compliance. As a point of comparison, Mr. Curtis noted that operators of other types of facilities, such as food servers and alcohol providers, are required to be retrained periodically. Ecology disagrees that annual retraining is necessary, and decided not to make any changes in the adopted rule.

First, annual retraining is not required under the federal grant guidelines. Retraining is only required under the guidelines if an UST system does not meet EPA's Significant Operational Compliance requirements (www.epa.gov/oust/cmplastc/soc.htm) or other requirements as determined by the state (EPA, 2007, pp. 7-8). Under the adopted rule, Ecology may require retraining whenever an UST system is not in compliance regulatory requirements.

Second, Ecology does not believe annual retraining of all Class A and Class B operators is necessary. The success of operator training is measured by regulatory compliance. There is no need to retrain operators of compliant UST systems. If Ecology determines that an UST system is not in compliance, then Ecology not only may require retraining of the operators, but may also require development of an operation and maintenance plan for the non-compliance UST system. This is the least burdensome approach that achieves the statutory goals and directive.

Issue 4-14: Should Class A and Class B operators who are retrained annually be exempt from the retraining requirements?

- Commenter: Marc Westfall (#2)
- Rule Section: WAC 173-360-740(1)

Response: Yes

In the proposed rule, Ecology exempted from the retraining requirements Class A and Class B operators who are retrained annually using a training program or examination meeting the requirements in WAC 173-360-730(1). Mr. Westfall recommended that Ecology eliminate this exemption, noting that non-compliance is likely to be more significant if the operators of the non-compliant system are retrained annually.

Ecology disagrees and decided not to make any changes in the adopted rule. First, the federal grant guidelines do not require retraining based on non-compliance if operators are retrained annually and the retraining meets the minimum training requirements (EPA, 2007, p. 8). Second, Ecology does not believe requiring additional training is the solution to the problem, as evidenced by the failure of annual retraining. In such cases, the source of the problem is probably not the frequency of training, but rather the adequacy of the training program or

examination. The solution to that problem is to withdraw Ecology's approval of the training program or examination. Third, Ecology also has the authority to require the development of operation and maintenance plans for non-compliant systems.

Issue 4-15: Should Class C operators be retrained annually or when changing facilities?

- Commenters: Marc Westfall (#2), Stuart Pennington (#10), Tim Curtis (#11), Chester Benson (#12), Julia Taffee (#17), Paul Struthers (#19)
- Rule Sections: WAC 173-360-740 and 173-360-760(2)

Response: No

In the proposed rule, Ecology required annual retraining of Class C operators, who are often the first responders at an UST facility. The federal grant guidelines do not require retraining of Class C operators (EPA, 2007, pp. 7-8). However, Ecology believed retraining was necessary to ensure that Class C operators remember how to identify and respond to emergencies.

One commenter, Mr. Westfall, requested that Ecology either eliminate the retraining requirement or change the frequency to every three years to mitigate the disproportionate impact on small businesses (franchisees). The other commenters, many of whom are training providers, recommended that Ecology require annual retraining Class C operators, arguing that retraining is essential for ensuring compliance. One commenter, Mr. Curtis, also noted that operators of other types of facilities, such as food servers and alcohol providers, are required to be retrained annually.

In the adopted rule, after considering all of the comments and consulting with other states and EPA, Ecology decided to eliminate the annual retraining requirement for Class C operators for the following reasons:

- First, the federal grant guidelines do not require annual retraining for any class of operators, including Class C operators. Further, the guidelines do not require retraining of Class C operators under any circumstances, including non-compliance (EPA, 2007, pp. 7-8).
- Second, the issue of annual retraining may be moot given the estimated annual turnover rate of Class C operators. EPA estimates the annual turnover rate to be 119.5% (EPA, 2011a and 2011b). Ecology relied on that estimate in its cost-benefit analysis of the rule amendments (Ecology, 2012).
- Third, Ecology no longer believes annual retraining of Class C operators is necessary to achieve statutory goals and objectives. Until proven otherwise, the additional cost and administrative burden of retraining Class C operators, even if relatively small, is not justifiable. Note that Ecology retains the authority to penalize non-compliance and require Class A and Class B operators to be retrained.

Issue 4-16: Should UST owners and operators be required to report to Ecology the designation and training of operators?

- Commenter: Stuart Pennington (#10) and Julia Taffee (#17),
- Rule Section: WAC 173-360-760

Response: No

The federal grant guidelines require states to establish a system for ensuring all operators are designated and trained, such as reporting or recordkeeping (EPA, 2007, p. 9). In the proposed rule, Ecology chose the least burdensome alternative to meet this requirement, which Ecology determined to be recordkeeping. Both of the commenters suggested that Ecology maintain a database to track compliance, which would require UST owners and operators to report compliance, including the designation and training of operators, to Ecology.

Ecology disagrees with the approach suggested by the commenters, and decided not to make any changes in the adopted rule. First, as noted above, the federal grant guidelines provide options to states (EPA, 2007, p. 9). Ecology chose the least burdensome of those options, which Ecology determined to be recordkeeping.

Second, while real-time information could be used by Ecology to track compliance and by training providers to identify potential customers, Ecology does not believe the marginal benefit of tracking such information would justify the additional cost and administrative burden of reporting and tracking that information. Also, Ecology believes that compliance with reporting requirements would be low and difficult to enforce, severely limiting the utility of the database.

Chapter 5: Secondary Containment

This chapter provides a concise explanatory statement for the rule amendments governing secondary containment and monitoring of tanks and piping. The chapter identifies the basis for the adopted rules (Section 5.1), provides an overview of the rules (Section 5.2), and responds to public comments on the proposed rules (Section 5.3).

5.1 Basis for Rules

Statutory Authority

In Chapter 90.76 RCW, the Legislature directs Ecology to adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005 (RCW 90.76.020(1)). The Legislature specified that those rules must include requirements for the following:

> Ground water protection measures, including secondary containment and monitoring for installation or replacement of all underground storage tank systems or components, such as tanks and piping, installed after July 1, 2007…

(RCW 90.76.020(1)(h)). The Legislature did not require the replacement or upgrading of existing single-walled tanks or piping.

Federal Requirements

Under the UST Compliance Act of 2005, states receiving federal funding must, at a minimum, require one of the following to protect ground water:

- Secondary containment of tanks and piping located within 1,000 feet of an existing community water system or potable drinking water well.
- Evidence of financial responsibility by manufacturers and installers, and certification by installers (42 U.S.C. Sec. 6991b(i); EPA, 2006a, pp. 1, 5-7).

The Legislature chose to require secondary containment of tanks and piping. The Legislature also chose to require such containment irrespective of the proximity of UST systems to an existing community water system or potable drinking water well (RCW 90.76.020(1)(h)).

To implement the secondary containment provisions in the UST Compliance Act of 2005, EPA published the following guidelines:

> US Environmental Protection Agency (EPA), 2006a. Grant Guidelines to States for Implementing the Secondary Containment Provision of the Energy Policy Act of 2005. Office of Underground Storage Tanks. EPA 510-R-06-001. www.epa.gov/oust/fedlaws/Final%20Sec%20Cont%20GLs%2011-15-06.pdf.

The guidelines establish the minimum requirements states receiving federal funding must meet in order to comply with the secondary containment requirements in the UST Compliance Act of 2005 (EPA, 2006a, p. 1).

5.2 Overview of Rules

The rules governing secondary containment and monitoring of tanks and piping are set forth in WAC 173-360-810 and 173-360-820, respectively.

For tanks, the rules specify:

- The applicability of secondary containment and monitoring (Section 810(1)).
- Secondary containment requirements, including performance standards and codes of practice (Section 810(2)).
- Monitoring requirements (Section 810(3)).

For piping, the rules specify:

- The applicability of secondary containment and monitoring (Section 820(1)).
- When an entire run of existing single-walled piping must be replaced (Section 820(2)).
- Secondary containment requirements, including performance standards and codes of practice for piping and containment sumps (Section 820(3)).
- Monitoring requirements (Section 820(4)).

The following new terms used in these rules are defined in WAC 173-360-120:

- Double-walled tanks and double-walled piping.
- Interstitial space.
- Piping run.
- Secondary containment.

5.3 Response to Comments

Several comments were received on the rules governing secondary containment. Ecology reviewed the comments and grouped them into a series of questions (the "issues"). Each of the questions reflects a particular issue or set of issues raised by one or more individuals or organizations. Following each question, Ecology identifies the commenters who raised the issues and the rule sections to which the question applies. Ecology then provides a response. Copies of written comments are included in Appendix B of this document.

Issue 5-1: What should be the effective date of the secondary containment requirements?

- Commenters: David C. Robinson (#13), Patty Senecal (#15), Thomas Beam (#18)
- Rule Sections: WAC 173-360-810(1), and 173-360-820(1) and (2)

Response: Effective date of the rule amendments

In the proposed rule, Ecology made the secondary and under-dispenser containment requirements apply retroactively back to the date specified in the authorizing statute (July 1, 2007). However, the Western States Petroleum Association, the Department of Defense, and the

Department of Energy argued in their comments that the requirements should only apply prospectively from the effective date of the rule amendments (October 1, 2012). If that was not possible, the commenters requested that Ecology at least provide a grace period in the rule for upgrading existing UST systems.

Upon further consideration, Ecology agrees with the commenters that the secondary and under-dispenser containment requirements should apply only prospectively from the effective date of the rule amendments (October 1, 2012).

First, the retroactive application of the requirements is not required under federal law. As explained in Section 5.1, the Legislature directed Ecology to adopt rules that are consistent with and no less stringent than federal requirements in the UST Compliance Act of 2005 (RCW 90.76.020(1)). EPA issued grant guidelines that establish the minimum requirements states receiving federal funding must meet in order to comply with the secondary containment provisions in the Act (EPA, 2006a, p. 1). Under the guidelines, after February 8, 2007, states must provided one of the following to EPA before receiving future grant funding:

- Certification indicating that the state meets the requirements in the guidelines.
- A document describing the state's efforts to meet the requirements (EPA, 2006a, p. 9).

According to EPA, neither the UST Compliance Act of 2005 nor the guidelines issued by EPA under that Act require states to impose secondary and under-dispenser containment requirements retroactively back to 2007. Furthermore, under the guidelines, states such as Washington who have not yet met the federal requirements can continue to receive federal funding, provided they continue to make efforts to meet those requirements.

Second, the prospective application of the requirements best reconciles the conflicting legislative directives in the authorizing statute, Chapter 90.76 RCW, as amended by Chapter 147, Laws of 2007. On the one hand, the Legislature directed Ecology to adopt rules requiring secondary and under-dispenser containment after July 1, 2007; on the other hand, the statutory requirement is prospective only and does not require previously installed equipment to be upgraded (RCW 90.76.020(1)(h)). Given that the Legislature did not direct Ecology to make the requirements apply retroactively, Ecology decided to reconcile the conflicting directives by making the requirements apply only prospectively from the effective date of the rule amendments (October 1, 2012).

Accordingly, in the adopted rule, Ecology changed the effective date of the secondary containment requirements to October 1, 2012. Ecology does not believe this change has a significant impact given that almost all UST systems installed since July 1, 2007, already meet these requirements.[3]

[3] Based on data from the Ecology UST database (WA Ecology 2012b), Ecology determined that only one of the UST systems installed since July 1, 2007, does not have secondarily contained tanks and piping. However, some of those systems may not be using interstitial monitoring. Also, Ecology cannot determine from the database whether pipes and dispensers installed since July 1, 2007, meet secondary and under-dispenser containment requirements

Issue 5-2: Does the rule require the replacement of existing single-walled tanks and piping?

- Commenter: Mike Purvis (#3)
- Rule Sections: WAC 173-360-810(1) and 173-360-820(1) and (2)

Response: No

Under the proposed rule, the secondary containment requirements would have applied only to tanks and pipes installed after July 1, 2007. In his comments, Mr. Purvis presumed that the rule would require him to replace his single-walled tanks and piping, and requested that Ecology provide a grace period for upgrading his UST systems.

First, based on data from the Ecology UST database (Ecology, 2012b), none of Mr. Purvis' tanks or pipes were installed after July 1, 2007. Therefore, even under the proposed rule, none of his tanks or pipes would need to meet the secondary containment requirements in the rule.

Second, as discussed under Issue 5-1, in the adopted rule, Ecology changed the effective date of the secondary containment requirements from July 1, 2007, to October 1, 2012. This means the rule does not require the replacement of any existing single-walled tanks or pipes. The change, though, does not affect Mr. Purvis.

Issue 5-3: Should the secondary containment requirements apply to American suction piping?

- Commenter: David C. Robinson (#13)
- Rule Sections: WAC 173-360-820(1)

Response: Yes

In the proposed rule, Ecology made the secondary containment requirements apply to suction piping that does not meet the standards in WAC 173-360-350(2)(b)(i) through (v). Such piping is often referred to as American suction piping. In his comments, Mr. Robinson requested that Ecology exempt such piping from the secondary containment requirements, arguing that the risk of significant releases is too minimal to justify the expense. Ecology disagrees and decided not to make any changes in the adopted rule.

First, under state law, suction piping not meeting the standards in WAC 173-360-350(2)(b)(i) through (v) must be secondarily contained. As explained in Section 5.1 above, the Legislature directed Ecology to adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005. See RCW 90.76.020(1) and (1)(h). Under that Act, EPA issued guidelines establishing minimum requirements states receiving federal funding must meet (EPA, 2006a, p. 1). Under those guidelines, states are only allowed to exempt suction piping that meets the standards cited above (EPA, 2006a, p. 7).

Second, Ecology's decision is consistent with the current rule, which only requires release detection for suction piping if the piping does not meet the standards in WAC 173-360-350(2)(b)(i) through (v). Release detection is required because releases from such piping are known to pose significant risks to human and the environment. Accordingly, Ecology believes

the added expense of secondary containment is justified for this type of suction piping, just as it is for pressurized piping.

Issue 5-4: Do the secondary containment requirements apply to piping located at marinas extending from the transition sump to the dispenser systems on the dock?

- Commenter: Bob Wiese (#16)
- Rule Sections: WAC 173-360-820(1)

Response: Depends

Under the adopted rule, the secondary containment requirements only apply to piping routinely containing regulated substances and in contact with the ground. So, if the piping is not in contact with the ground, then the secondary containment requirements do not apply. The answer to the question depends on site-specific factors.

Issue 5-5: Should the rule specify which piping does not routinely contain product and is therefore exempt from the secondary containment requirements?

- Commenter: David C. Robinson (#13)
- Rule Sections: WAC 173-360-820(1)

Response: No

In the proposed rule, Ecology specified that the secondary containment requirements only apply to piping routinely containing regulated substances and in contact with the ground. In his comments, Mr. Robinson requested that Ecology specify which types of piping do not routinely contain regulated substances and are therefore exempt from the requirements. He specifically requested guidance on remote fill piping, return line piping, oil/water separator piping, and waste oil collection piping.

In the adopted rule, Ecology declined to specify which types of piping do not routinely contain regulated substances and are therefore exempt from the secondary containment requirements. Ecology declined to do so because:

- Determining whether piping routinely contains regulated substances depends upon on site-specific factors.
- Specifying types of piping that do not routinely contain regulated substances would also impact the applicability of existing requirements that are beyond the scope of this rule making.
- Making such changes without seeking additional public comment would be inappropriate.

Ecology is willing to work with owners on a site-specific basis to determine whether piping routinely contains regulated substances and is therefore regulated.

Issue 5-6: Should ASME B31.1 and B31.4 be added to the non-exclusive list of accepted codes of practice in the rule?

- Commenter: Patty Senecal (#15)
- Rule Sections: WAC 173-360-820(3)(b)

Response: No

Under the proposed rule, double-walled piping must be designed and constructed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory. Ecology also included a non-exclusive list of codes that may be used to meet this requirement. They are the same codes EPA included in the proposed federal rule (EPA, 2011). In her comments, Ms. Senecal requested that Ecology add ASME B31.1 and B31.4 to the list.

In the adopted rule, Ecology decided not to include ASME B31.1 and B31.4 because they were not included by EPA in the proposed federal rule and Ecology is not sufficiently familiar with them to determine whether they could be used to meet the regulatory requirement. However, by not including the codes in the rule, Ecology is not implying that the codes may not be used. Rather, Ecology has simply declined to pass judgment. As noted above, the list of codes in the rule is a non-exclusive list. Any applicable codes developed by a nationally recognized association or independent testing laboratory may be used to meet the requirement.

Issue 5-7: May other release detection methods be used in addition to interstitial monitoring?

- Commenter: Bob Wiese (#16)
- Rule Sections: WAC 173-360-810(3) and 173-360-820(4)

Response: Yes

In his comments, Mr. Wiese asked whether other release detection methods could be used in addition to interstitial monitoring, including annual line tightness tests for pressurized piping.

The adopted rule requires that piping be monitored interstitially for releases at least every thirty days in accordance with WAC 173-360-345 (6)(h)(i). The rule does not prevent UST owners and operators from using additional methods of release detection, such as annual line tightness tests. However, other release detection methods may not be used in place of interstitial monitoring. Also, Ecology will not regulate the use of those additional methods.

Issue 5-8: Should the term "continuous monitoring" be defined?

- Commenter: Bob Wiese (#16)
- Rule Sections: WAC 173-360-810(3) and 173-360-820(4)(c)

Response: No

In the proposed rule, Ecology required methods that continuously monitor the interstitial space using a vacuum, pressure, or a liquid be able to detect a breach in both the inner and outer walls. Mr. Wiese requested that Ecology define the term "continuous monitoring" in the rule, arguing

that the definition will be crucial in determining whether periodic testing of secondary containment will be required under the proposed federal rule.

In the adopted rule, Ecology decided not to define the term "continuous monitoring." The term does not need to be defined for the limited purposes of the adopted rule. Mr. Wiese's comments apply to proposed new federal requirements that have not been adopted by EPA.

Issue 5-9: Is it more difficult to identify areas of bulk piping needing repairs if the piping is double-walled?

- Commenter: Robert M. Shirley (#15)
- Rule Sections: WAC 173-360-820

Response: No

In his comments, Mr. Shirley suggested that it is more difficult to identify areas of bulk piping needing repairs (due to leaks or thinning) if the piping is double-walled. This difficulty, he argued, can place piping out of service for longer periods of time, impacting DoD fueling operations.

First, Ecology acknowledges that it may be somewhat more difficult to identify areas of piping needing repairs if the piping is double-walled. However, there are methods available that can be used to confirm the integrity of the primary and secondary containment, and to help identify the location of any detected leaks.

Second, as discussed in Section 5.1 above, secondary containment of piping is required under state law. The Legislature directed Ecology to adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005, including for secondary containment of tanks and piping (RCW 90.76.020(1) and (1)(h)).

Chapter 6: Under-Dispenser Containment

This chapter provides a concise explanatory statement for the rule amendments governing containment under dispenser systems. The chapter identifies the basis for the adopted rules (Section 6.1), provides an overview of the rules (Section 6.2), and responds to public comments on the proposed rules (Section 6.3).

6.1 Basis for Rules

Statutory Authority

In Chapter 90.76 RCW, the Legislature directs Ecology to adopt rules that are consistent with and no less stringent than the federal requirements in the UST Compliance Act of 2005 (RCW 90.76.020(1)). The Legislature specified that those rules must include requirements for the following:

> Ground water protection measures, including … under dispenser spill containment for installation or replacement of all dispenser systems installed after July 1, 2007

(RCW 90.76.020(1)(h)). The Legislature did not require the replacement or upgrading of existing dispenser systems.

Federal Requirements

Under the UST Compliance Act of 2005, states receiving federal funding must, at a minimum, require one of the following to protect ground water:

- Containment under dispenser systems located within 1,000 feet of an existing community water system or potable drinking water well.
- Evidence of financial responsibility by manufacturers and installers, and certification by installers (42 U.S.C. Sec. 6991b(i); EPA, 2006a, pp. 1, 5-7).

The Legislature chose to require containment under dispenser systems. The Legislature also chose to require such containment irrespective of the proximity of the dispenser systems to an existing community water system or potable drinking water well (RCW 90.76.020(1)(h)).

To implement the under-dispenser containment provisions in the UST Compliance Act of 2005, EPA published the following guidelines:

> US Environmental Protection Agency (EPA), 2006a. Grant Guidelines to States for Implementing the Secondary Containment Provision of the Energy Policy Act of 2005. Office of Underground Storage Tanks. EPA 510-R-06-001. www.epa.gov/oust/fedlaws/Final%20Sec%20Cont%20GLs%2011-15-06.pdf.

The guidelines establish the minimum requirements states receiving federal funding must meet in order to comply with the under-dispenser containment requirements in the UST Compliance Act of 2005 (EPA, 2006a, p. 1).

6.2 Overview of Rules

The rules governing under-dispenser containment are set forth in WAC 173-360-830. The rules specify:

- Which dispenser systems require under-dispenser containment (Section 830(1)).
- Performance standards for under-dispenser containment (Section 830(2)).
- Installation and reporting requirements (Section 830(3)).

The following new terms used in these rules are defined in WAC 173-360-120:

- Dispenser.
- Dispenser system.
- Under-dispenser containment.

6.3 Responses to Comments

Several comments were received on the rules governing under-dispenser containment. Ecology reviewed the comments and grouped them into a series of questions (the "issues"). Each of the questions reflects a particular issue or set of issues raised by one or more individuals or organizations. Following each question, Ecology identifies the commenters who raised the issues and the rule sections to which the question applies. Ecology then provides a response. Copies of written comments are included in Appendix B of this document.

Issue 6-1: What should be the effective date of the under-dispenser containment requirements?

- Commenters: Patty Senecal (#15) and Thomas Beam (#18)
- Rule Sections: WAC 173-360-830(1)

Response: Effective date of the rule amendments

In the proposed rule, Ecology made the under-dispenser containment requirements apply retroactively back to the date specified in the authorizing statute (July 1, 2007). However, the Western States Petroleum Association and the Department of Energy argued in their comments that the requirements should only apply prospectively from the effective date of the rule amendments (October 1, 2012). If that was not possible, the commenters requested that Ecology at least provide a grace period in the rule for upgrading existing UST systems.

In response to these comments, Ecology changed the effective date of the under-dispenser containment requirements in the adopted rule to October 1, 2012. The basis for the change is explained under Issue 5-1, which involves the effective date of the secondary containment requirements.

Issue 6-2: Do the under-dispenser containment requirements apply only to UST systems that are connected to a dispenser system?

- Commenter: Thomas Beam (#18)
- Rule Section: WAC 173-360-830(1)

Response: Yes

In the proposed rule, Ecology did not explicitly state that the under-dispenser containment requirements apply only to UST systems connected to a dispenser. Given the regulatory context, Ecology did not believe that such a statement was necessary. However, in his comments, Mr. Beam requested that Ecology clarify this in the rule.

In response to the comment, Ecology clarified in the adopted rule that the under-dispenser containment requirements apply only to UST systems that are connected to a dispenser.

References

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WA Department of Ecology (Ecology), 2012a. Small Business Economic Impact Statement for Chapter 173-360 WAC, Underground Storage Tank Regulations. Publication number 12-09-044.

WA Department of Ecology (Ecology), 2012b. Integrated Site Information System (ISIS). Queried July 2012.

Appendix A

Commenter Index

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Purpose of Index

The Commenter Index on the following page identifies the people who commented on Ecology's proposed amendments to chapter 173-360 WAC, Underground Storage Tank Regulations, and where you can find Ecology's response to their comments.

Commenters

In total, 19 people submitted comments on the proposed rule amendments. Ecology assigned each commenter a unique identification number (from 1 to 19) in the order comments were submitted. The commenters are identified in the Index by:

- Number;
- Name and affiliation; and
- The date comments were submitted.

Comments

Ecology identified a total of 68 separate comments. Ecology assigned each of those comments a unique number (from 1 to 68). That number is identified in:

- The Index; and
- The margins of the written comments (Appendix B) and the public hearing transcripts (Appendix C).

Issues

For each those 68 comments, the Index identifies the Issue number (e.g., "2-5") in the Concise Explanatory Statement where Ecology responded to the comment.

Commenter Index

Commenter				Response to Comment	
#	**Name**	**Affiliation**	**Date**	**Comment #**	**Issue #s**
1	Shaun Hubbard		3/28/12	1	2-5
2	Marc Westfall	7-Eleven, Inc.	3/30/12	2	4-6
				3	4-9, 4-10
				4	4-14
				5	4-10, 4-15
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3	Mike Purvis	Hood Canal Grocery	4/02/12	7	5-2
4	Sheryl Herauf	Rick's Chevron	4/02/12	8	2-5
5	Scott Tomren	The Riley Group, Inc.	4/03/12	9	3-6
6	Rod Smith	R.H. Smith Distribution Co. Inc. and Washington Oil Marketers Association	4/25/12	10	4-7
				11	4-8
7	Norman Bolton	Convenience store	4/25/12	12	2-5
8	Rob Olsen	Tacoma-Pierce County Health Department	4/26/12	13	2-6
				14	2-6
				15	2-6
9	John S. Fujii	North MountainView LLC	4/30/12	16	2-5
				17	2-4
10	Stuart Pennington		5/01/12	18	4-13
				19	4-15
				20	4-16
				21	2-6
11	Tim Curtis	Pacific Environmental & Industrial Services	5/01/12	22	4-13
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12	Chester Benson		5/01/12	24	4-13
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13	David C. Robinson	Naval Facilities Engineering Command Northwest	5/03/12	27	3-7
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14	Patty Senecal	Western States Petroleum Association	5/04/12	37	2-1, 2-2, 2-3, 2-4
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15	Robert M. Shirley	U.S. Department of Defense, Regional Environmental Coordinator, Region 10	5/04/12	41	3-4
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16	Bob Wiese	Northwest Tank & Environmental Services, Inc.	5/04/12	45	5-8
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17	Julia Taffee		5/04/12	49	4-13
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18	Thomas Beam	U.S. Department of Energy, Mission Support Alliance, and other Hanford Site contractors	5/04/12	52	3-7
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19	Paul Struthers		5/04/12	63	4-13
				64	4-14

Appendix B

Copies of Written Comments

This page is purposely left blank.

From:	Shaun Hubbard
To:	ECY RE UST Rule
Subject:	Underground Storage Tank Regulations
Date:	Wednesday, March 28, 2012 6:40:10 PM

Dear Michael Feldcamp,

1 I am writing in support of the proposed changes to the Underground Storage Tank regulations that get us closer to the protection of the health of our ground water and therefore the health and safety of everyone.

Thank you.

Shaun Hubbard

San Juan Island

From: Westfall, Marc
To: ECY RE UST Rule
Subject: UST RULE MAKING UPDATE – PROPOSED RULE review and comment
Date: Friday, March 30, 2012 4:46:01 PM

Mr. Feldcamp,
I appreciate the opportunity to comment on the proposed rule making. After reviewing the proposed rule I have comments I would like to submit as noted below. I appreciate your consideration of these comments. Thank You

Operator Training Requirements:

2 **WAC 173-360-710 (2)** Class C operators must be employees of the UST system owner or operator:

- The business model has changed over the years and one of the models today is to franchisee facilities such as large companies like 7-Eleven Inc. have done. Under a franchise agreement the Franchisee is an independent operator and the employees are not directly employed by the Franchisor. 7-Eleven Inc. would like to request that the rule take this into consideration and allow the UST owner/operator to designate Class C operator's on their behalf.

3 **WAC 173-360-730 (2) (a)** Each Class C operator must successfully complete a classroom, computer, or field-based training program that:(a) Is developed and administered by the department, a designated Class A or Class B operator at the UST facility, and/or an independent third party approved by the department:

- 7-Eleven Inc. supports the use of computer based training (CBT) and has developed many CBT's for various training requirements. 7-Eleven Inc. and many other large companies however administer their CBT's internally. In the case of the Class C Operator CBT, 7-Eleven Inc. has developed a program based on a third party supplier's product and would request that the rule take into consideration allowing companies with a CBT module to get approval with the department same as a third party.

4 **WAC 173-360-740 (1) (a) (b)** Class A and Class B operators. (a) Applicability. If the department determines the owners and operators of an UST system are not in compliance with the requirements of this chapter, the department may require the Class A and Class B operators of that system to be retrained in accordance with (b) of this subsection. However, this provision does not apply to Class A and Class B operators who are retrained annually using a training program or examination meeting the requirements in WAC 173-360-730(1)

- While 7-Eleven Inc. supports the requirement for re training if an operator is found to be in significant non compliance however the allowance to be exempt due to annual retaining is conflicting. If an operator is retaining annually their understanding of UST operation would be expected to be retained to a higher degree than an operator that does not retrain annually and therefore would make non compliance a more significant issue. 7-Eleven Inc. would recommend if retaining annually is allowed that it not be an exemption for retraining due to non compliance.

WAC 173-360-740 (2) (a) Class C operators. (a) Frequency**.** Class C operators must be retrained at least
annually and whenever the emergency response procedures at an UST facility are changed. Class C operators must also be retrained before assuming the duties of a Class C operator at a different UST facility

5
- Large companies such as 7-Eleven Inc. through their franchisees provide jobs to hundreds of employee's. The requirement to retrain the Class C Operators annually is a huge cost and disparate to smaller operators with only a few employees. 7-Eleven Inc. would to like to request that this be considered on scale and with respect to the department recommend consideration of every 3 years.

6
- Due to the changing employment environment there are many part time employees in the workforce and many employers in convenience store industry share employees between faculties due to economic limitations. 7-Eleven Inc, would like to request consideration be made

to allow trained Class C Operators to have reciprocity with regard to facilities within the same Class A/B owner/operated facilities. An example is in Colorado and Utah per their respective rules and managed by requiring the Class C operators training documentation be present in each facility.

Marc Westfall
7-Eleven, Inc.
Region Environmental Compliance Manager
NV/CO/UT/WA/OR/ID
Cell - 214-415-0146
Email - marc.westfall@7-11.com

From:	Hood Canal Grocery
To:	ECY RE UST Rule
Subject:	new rules
Date:	Monday, April 02, 2012 4:06:57 PM

Michael Feldcamp
(In regards to the possible rule changes to ust.regulations)

7 This could be very impactfull as you know a single wall fuel tank that is lined is ok now so there are many fuel dealers that would need to install new tanks if this rule is changed,that would be very exspensive.

If you impose these new rules ,will you allow a grace period in order to plan for these changes?

mike purvis
hco@hcc.net

4-2-12

Dept. of Ecology:

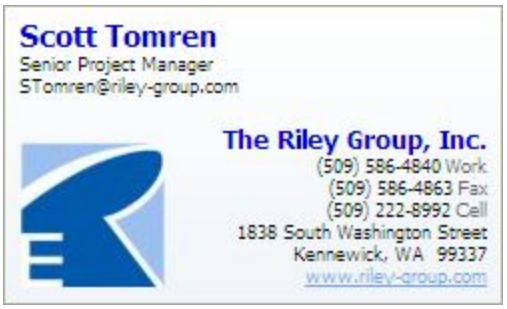
8 I am commenting on the new rules you are about to adopt on our underground storage tanks. I don't know how much more us little guys can take. We feel you're trying to put us out of business. Back when our economy was good we were able to do the upgrades, but since our economy has gotten so bad we wouldn't be able to do anymore, we're barely hanging on by a thread now. And are lucky to get one load of fuel a month and had to lay off our employees. It's really been tough these last 5 years and can't see it getting any better for us living in a small rural town. After 30 years of being here in business, I would hate to have to lock my doors, but would have too if Ecology puts another financial burden on us.

Sheryl Herring
Rick's Chevron
P.O. Box 424
Packwood WA. 98361

From:	Scott Tomren
To:	ECY RE UST Rule
Subject:	Comment on proposed UST rule changes
Date:	Tuesday, April 03, 2012 11:23:38 AM
Attachments:	Scott Tomren.vcf

9 With regard to the prohibition on removing contents from waste oil USTs at facilities without a compliance tag, I believe there should be exemptions added for abandoned systems. There are still sites within Washington where USTs abandoned prior to 1988 are discovered during redevelopment, and they frequently still contain waste oil or fuel which must be removed prior to decommissioning. Under the proposed rule, vendors would apparently be unable to remove the contents of the waste oil USTs.

A second exemption should also be added for USTs at which there is evidence of an ongoing release.



The Riley Group, Inc.
Environmental • Geotechnical • Wetland

From:	norman bolton
To:	ECY RE UST Rule
Subject:	comments on
Date:	Wednesday, April 25, 2012 2:40:49 PM
Attachments:	Department of Ecology gas tank storage regulations.doc

my comments on under ground storage tanks are enclosed

Department of Ecology gas tank storage regulations

To whom it may concern

12 We are a small convenience store located in Roseburg wash. We are approx 20 miles from the nearest gas and convenience store. We serve a small community. The new ordnances would likely cause us to quit pumping gas In doing so it will make it to costly to stay in business thus depriving the community of needed services. We estimate it would cost about $100000 to comply with the new requirements. We currently meet all requirements with double walled tanks etc. at this time. The present requirements with insurance, permits etc make it almost break even at it is. I realize this statement is mute, as the law will go into effect no matter the consequences to the people involved.

From:	Rob Olsen
To:	ECY RE UST Rule
Cc:	Blum, Mike (ECY); Brad Harp
Subject:	UST Rule Revision: Tacoma-Pierce County Health Dept Comments
Date:	Thursday, April 26, 2012 9:19:15 AM

On behalf of the Tacoma-Pierce County Health Department, I would like to provide comments for the Ecology UST Rule Revision.

13 1. The Health Department requests Ecology disallow installation and require decommissioning of 'observation wells' at UST sites that do not meet construction standards set forth in Chapter 173-160 WAC.

Background: So-called 'Observation Wells' appear to be included in routine service station UST installations, usually at the corners of the UST basin. These wells are made from slotted PVC pipe extending from a surface port to the bottom of the UST basin. During UST decommissioning, these observation wells are found to have no surface seals. These wells are not registered with Ecology. Surface spills and runoff may easily intercept these wells providing a direct conduit to site soils and groundwater. The Health Department finds virtually no evidence these wells are used for their intended purpose after installation. These 'observation wells' meet the definition of a well but lack construction methods and components protective of the subsurface environment. The gains from increasingly protective UST standards should not be undermined by these unsealed wells.

14 2. Ecology should require site cleanup prior to approving upgrade and installation of USTs at sites on the Leaking Underground Storage Tank and/or Confirmed and Suspected Contaminated Sites List.

15 3. Ecology UST decommissioning and assessment requirements should accommodate the challenges of characterizing pea gravel – the most common modern UST basin backfill material. Pea gravel cannot be properly analyzed by acceptable laboratory methods (i.e. NWTPH-Gas, Dx). An alternative may include field screening methods such as 'sheen test' and PID screening. Pea gravels found to be impacted with hazardous materials should be disposed of at a facility permitted to accept that waste stream. Presently, no regulation nor guidance document addresses this issue.

Thank you for your consideration.

Rob Olsen, REHS
Environmental Health Specialist II
UST Program/ Environmental Health Division
3629 So D St, Tacoma, WA 98418
(253) 798-2855
UST Program

****

From:	John S Fujii
To:	ECY RE UST Rule
Cc:	John S Fujii; david coles; David P. Rossmiller; david fujii
Subject:	Public Comment re. Revisions to UST Rules
Date:	Monday, April 30, 2012 3:01:09 PM
Attachments:	NB UST Release - Rule Revision 4-30-2012.pdf

Please see appended public comment.

John S. Fujii
Vancouver Washington

NORTH MOUNTAINVIEW LLC
5803 Texas Drive
Vancouver, WA 98661
April 29, 2012

Mr. Michael Fieldcamp
Washington Department of Ecology Cleanup Program
PO Box 47600
Olympia, WA 98504 – 7600

Subject: UST Rule Revision – Public Comment

Dear Mr. Fieldcamp:

16-17 Thank you for this opportunity to comment on the state of Washington rules for preventing leaks from underground storage tanks. Our family business knows from eight unfortunate years of contamination from a neighboring UST rupture that current rules for preventing leaks and for voluntary cleanup do not adequately safeguard public health, nor damaged parties downstream, and do little to mitigate spread of contamination through prompt cleanup action, even after the release source has been established. The proposed UST rule revision intended to prevent UST releases is heartily supported, and DOE is hereby strongly urged to revise rules governing the Voluntary Clean-up Program as well, in an objective, professional common-sense way. The latter can be practicably achieved by a proposal that imposes reasonable requirements for cleanup under the Voluntary Program once the source of pollution has been established, as it was in our case 3 – 5 years ago. Current rules places onus on the injured complainant, first to prove that a release has occurred, then to establish the nature and source of a substantial release, while the polluter is essentially free to ignore, then deny a release despite being the probable source until forced to acknowledge the release after years of proactive pursuit by an injured downstream party. A responsible UST operator can readily document a release of substantial magnitude from inventory records and soil analyses immediately following his discovery of a rupture. In our case, this did not happen until it was in the polluter's interest to make an insurance claim for released product while still not directly addressing his responsibility for cleanup under existing Voluntary Clean-up rules.

A polluter should not be allowed to "run out the clock" and cause preventable damage to down-stream neighbors making meaningless motions of "cleaning up" under rules of a Voluntary program that has no effective enforcement or accountability for prompt and diligent action on the part of the polluter. Years go by while environmental and financial damages mount for downstream properties and parties. ***Prevention of leaks*** is important, and is hereby supported, but equally important are smart rules for governance of an effective Voluntary clean up program that places accountability on polluters to be prompt and diligent in the cleanup. ***By any objective standard, the current voluntary cleanup rules are clearly ineffectual and inequitable to damaged parties!***

If Washington DOE is receptive to professional input on how the Voluntary Cleanup rules can be revised for smart governance, the undersigned hereby offers to meet with DOE with its environmental consultant to provide technical and small business common sense input on revisions. Besides a cleaner environment for Washington, smart revision of current rules should reduce the level of generally unproductive litigious disputes that are costly to all parties and the judicial system.

Respectfully,

North MountainView LLC

By: _____
John S. Fujii, Manager

From:	Stuart Pennington
To:	ECY RE UST Rule
Subject:	Annual UST Training
Date:	Tuesday, May 01, 2012 6:52:48 AM

18-21 I support annual training for UST compliance for all parties who operate fuel dispensing devices. I would also support such training for those who operate above ground storage facilities, because that product ends up outside the tank and has the potential to breach containment. Above ground facilities also operate the same components as UST and are only differentiated by configuration - the tanks are exposed to the elements above ground as opposed to underground.

I have worked in the petroleum industry since 1985. I have seen the results of the untrained and the non-compliant operating USTs. I also know from experience, that if you want any type of compliance in any area, that you have to keep it in the front of people's minds. At the companies that I worked at we trained people annually and had them take a test to prove that they understood the material. The training was for company operated stores and independent dealers alike. This resulted in improved environmental performance over time as the number of violations decreased significantly. It also helped to stress that environmental issues were a priority and weren't being paid lip service. We let people know that pencil whipping would not be tolerated or condoned.

Annual testing combined with compliance inspections and a training database for those issued certificates for state DOE approved training will help protect the environment and the integrity of the training and certification program.

Stuart Pennington

From:	Tim Curtis
To:	ECY RE UST Rule
Subject:	UST rule proposal
Date:	Wednesday, May 02, 2012 2:03:08 AM

To Michael Feldcamp, Mike Blum and the other fine folks at the DOE,

I would like to make a formal statement regarding the new proposed DOE UST rules.

22-23 While I absolutely agree with the new proposals that were laid out in your recent mailing, I believe there is a glaring mistake. You do not require mandated training on an on-going basis.

I will explain:
I'm an authorized DOE UST trainer, and because of this have been exposed to an extensive group of UST owners. Many of them, hospitals, transit agencies, government agencies, etc., are very aware of the rules and are cognizant of the regulations that they need to follow. However, the most dominant UST group are gasoline retailers. At this point in time most of these are not company operated. They are independent dealers, jobbers, and franchisees that are not under the legal regulations of the major oil companies.

I worked for 25 years with Arco and Bp at the gasoline retail level. There was a focus on environmental compliance previously that does not exist currently. Environmental departments at oil companies have been devastated by down-sizing and cost-cutting. Nobody is watching the store.

I am at UST sites on a daily basis. I'm appalled at their business practices. They will do whatever they can to "cheat the system". Granted, their volumes are down and their margins are tight. Money is an issue for them. But that should not preclude them from proper documentation, system testing, legal waste disposal, etc. They absolutely cut corners when it comes to environmental issues.

I understand that the rescources of the DOE are limited. Their inspectors do a great job. But most of these sites are only inspected every 3 years, and advance notice is given to retailers. This allows them to "fix" their paperwork. It is the only time that most of them actually care about their environmental practices. Just to try to stay out of trouble and avoid fines.

If the goal is to keep these sites clean then repetitive training MUST be mandatory. The state hammer over their head is the ONLY thing that will ensure that they adhere to the regulations.

Food servers, alcohol providers, WASHDOT workers, HAZMAT employees all are required to have recurring training. If the guy making your french fries has to be re-certified then why not re-train the person who has 40,000 gallons of toxic product next to every storm sewer and drainage system in the state? What is the goal?

The answer is easy. The state already relies upon authorized trainers to certify the UST sites. We all keep records of who we train at the A/B level. If yearly refresher training was required we all have a clientele list. It would be easy to contact them for their required

updates, etc. The state incurs ZERO COST but the benefit to the environment is unquestionable. We all want the UST operators to do the right thing.

Thank you,

Tim Curtis
Pacific Environmental & Industrial Services

From:	Chester Benson
To:	ECY RE UST Rule
Subject:	Annual Training
Date:	Wednesday, May 02, 2012 10:29:57 PM

To the Washington Department of Ecology:

24-26 I want to strongly suggest that the Washington Department of Ecology require all owners/operators and managers of Underground Storage Tank facilities receive annual training. I have been training these people for several years now, and I have found many of them need annual refresher courses. In particular, many owners and managers of gas stations are always looking for ways to save money, and they do not hesitate to ignore environmental and safety regulations. They often actually ask for advice on getting around DOE regulations, even as we keep telling them they cannot do so. Annual training will help remind them of state requirements, as will not allowing deliveries to facilities that are not fully in compliance.

I have also found that many of these owners/operators and managers have *very* limited English-language skills. The training company I work with has tried to accommodate them with translators, but here again, they need frequent reminders in order to get across the importance and urgency of following safety regulations.

I believe that only mandatory annual training, combined with more frequent inspections and heavier fines, will persuade most UST facility owners and managers to take the DOE's rules seriously and work hard to preserve the environment and keep the public – and their own employees – safe.

Sincerely,

Chester Benson

From:	Robinson, David C CIV NAVFAC NW, EV11
To:	ECY RE UST Rule
Subject:	Proposed UST Rule Comments (NAVFAC NW)
Date:	Thursday, May 03, 2012 4:47:55 PM
Attachments:	EcologyCommentForm(NAVFAC NW).docx

Dear Mr. Feldcamp:

As the Naval Facilities Engineering Command Northwest (NAVFAC NW) Regional UST Manager, I am responsible for coordinating responses for various environmental policies or regulatory matters of interest. We at NAVFAC NW appreciate the opportunity to provide comments on the 21 March, 2012 notice, pertaining to the proposed rules for underground storage tanks.

NAVFAC NW has identified some issues of concern which are detailed in the enclosed comments.

If you have questions or need additional information, please contact me.

Sincerely,

DAVID C. ROBINSON
Naval Facilities Engineering Command Northwest
1101 Tautog Circle
Silverdale, WA 98315-1101
Office: 360-396-0047
Fax: 360-396-0857

NAME: David Robinson
ORGANIZATION: Naval Facilities Engineering Command Northwest
ADDRESS: 1101 Tautog Circle, Silverdale, WA 98315
PHONE: 360-396-0047
E-MAIL: David.C.Robinson2@Navy.mil

DRAFT RULE SECTION [e.g., WAC 173-360-510(1)]	**COMMENT**	**RECOMMENDATION**
WAC 173-360-120 Definitions 27	The proposed rule language lacks a definition for UST facility. Ecology uses the term "UST facility" throughout the regulation without defining the term. "UST site" and "UST system" are defined. A UST site "...encompasses all of the property within a contiguous ownership that is associated with the use of the tanks." How are a UST site and a UST system different than a UST facility?	Proposed change: Replace "UST facility" with "UST site."
WAC 173-360-165 Delivery prohibition 28	Prohibiting the delivery of regulated substances to an entire UST facility could potentially lead to greater environmental or other risks. For example; sewage lift stations with emergency generators fueled by UST. Sewage lift stations need to be kept running to prevent backup of the system. Another example; federal facilities that deal in national defense utilize USTs for many functions. Prohibiting delivery to USTs on an entire national defense facility would put our nation at great risk.	Proposed language reads: If the department determines the owners and operators of an UST system are violating any requirement of this chapter or chapter 90.76 RCW, the department may prohibit the delivery, deposit, or acceptance of regulated substances to the system or the entire UST facility where the system is located. Proposed change: Remove the line "or the entire UST facility where the system is located."
WAC 173-360-165 Delivery prohibition 29	Prohibiting the delivery of regulated substances to a UST system or an entire UST facility could potentially lead to greater environmental or other risks. For example; federal facilities that deal in national defense utilize USTs for many functions. Prohibiting delivery to USTs on an entire national defense facility would put our nation at great risk.	Proposed language reads: If the department determines the owners and operators of an UST system are violating any requirement of this chapter or chapter 90.76 RCW, the department may prohibit the delivery, deposit, or acceptance of regulated substances to the system or the entire UST facility where the system is located. Proposed change: Add exemptions to this language that include, but are not limited to federal facilities.

WAC 173-360-165 (5) Withdrawal of waste oil 30	Prohibiting the withdrawal of waste oil from USTs could potentially lead to greater environmental or other risks. For example; oil/water separators with UST waste oil collection tanks need to be emptied on a regular basis to operate correctly. If a system such as this is prohibited from having the waste oil withdrawn, it would lead to a greater environmental risk.	Proposed language reads: Without the prior written authorization of the department, persons may not withdraw, and owners and operators may not allow the withdrawal of, regulated substances from a waste oil UST system subject to delivery prohibition. Proposed change: Add exemptions to this language including, but not limited to, oil/water separator collection tanks.
WAC 173-360-730 (2)(c) Class C Operators 31	Training and certification by either Class B or Class A operators is sufficient to verify the knowledge and skills of Class C operators. Testing and examination of Class C operators is redundant and not required in federal laws.	Proposed language reads: Includes an evaluation of operator (Class C) knowledge, such as testing or practical examination, that reasonably determines whether the operator has the necessary knowledge and skills to meet the responsibilities of the class. Proposed change: Remove testing or examination requirement and replace with requiring Class C training certification by Class A or Class B operators.
WAC 173-360-810(1) Secondary containment of tanks 32	Requiring secondary containment and monitoring on tanks installed after July 1, 2007 makes these regulations retroactive. This retroactive requirement forces operators to upgrade equipment installed between July 1, 2007 and the time of new rule adoption. If the intent is to require replacement of equipment installed after 2007 that doesn't meet these requirements, this should be formally addressed, including allowing public comment and time for an upgrade period.	Proposed language reads: Tanks installed or replaced after July 1, 2007, must be secondarily contained and monitored for releases in accordance with the requirements in this section. Proposed change: Change the date from July 1, 2007 to the date this regulation becomes final.
WAC 173-360-820(1) Secondary containment of piping 33	Requiring secondary containment and monitoring on piping installed after July 1, 2007 makes these regulations retroactive. This retroactive requirement forces operators to upgrade equipment installed between July 1, 2007 and the time of new rule adoption. If the intent is to require replacement of equipment installed after 2007 that doesn't meet these requirements, this should be formally addressed, including allowing public comment and time for an upgrade period.	Proposed language reads: Piping installed or replaced after July 1, 2007, routinely containing regulated substances and in contact with the ground must be secondarily contained and monitored for releases in accordance with the requirements in this section. Proposed change: Change the date from July 1, 2007 to the date this regulation becomes final.

WAC 173-360-820 Secondary containment of piping 34 35	Current and new proposed regulations fail to address piping requirements in a few key areas: 1) Piping is characterized as either suction (safe or American), pressurized, or not routinely containing product (in the case of vent lines). Regulations do not clearly address piping applications such as remote fill piping, generator return line piping, day tank overflow piping, polishing system return line piping, or piping carrying product from a oil/water separator. Although in most of these piping applications, the piping in often empty, it also does routinely contain product. Treating this piping as piping that does not routinely contain product is not appropriate, because it carries a much more significant chance of release than vent piping. While pressure in this piping is often atmospheric or only slightly above, it is not suction piping, which seems to imply that automatic line leak detectors are required. Installation of line leak detectors is not possible or practical in these situations. A more practical solution would be to exempt remote fill piping, return line piping, oil/water separator piping, and waste oil collection piping from any requirements for automatic line leak detectors, but require that it is double walled and monitored. 2) Another key area that regulations do not currently the requirements of installations is in the case of pressurized fuel piping operating automatically to carry product to an emergency generator, day tank, or polishing system. Many of these systems are installed with mechanical automatic line leak detectors, which although will go into slow flow, may never alert an operator of the condition, since slow flow will not be recognized by these automated systems.	Proposed change:1) Address piping requirements for additional types of piping associated with USTs, and 2) require automatic line leak detectors have ability to shut down pumps if fuel system can operate in a manner that slow flow cannot immediately be recognized by a person conducting a fueling operation.

WAC 173-360-820(4)(b) Release detection 36	Current language is not clear whether safe suction piping is excluded. Also, this new section of the rule appears to treat American Suction systems similar to pressurized systems, by requiring installation of containment sumps and double walled piping with interstitial monitoring. The level of risk to the environment is not similar between an American suction system and a pressurized system. Requiring double walled, monitored piping with containment sumps is excessive for American suction systems. This requirement may be problematic also since occasionally safe suction systems are converted to American suction systems. With this new requirement, if a single walled safe suction system installed after 2007 is converted to American suction, the piping would have to be replaced with double walled, and monitors and transition sumps installed. Since American suction systems are below atmospheric pressure while conveying product, the only potential release if from static pressure of the fuel in the pipe when the system is not operation, the risk of significant release is too minimal to justify the expense of requirement double walled piping, sumps, and monitoring equipment.	Proposed language: Suction piping must be monitored interstitially for releases at least every thirty days in accordance with WAC 173-360-345 (6)(h)(i). Proposed change: Clarification on types of piping covered by this section.

You may add as many additional rows to the table as needed.

From:	Patty Senecal
To:	ECY RE UST Rule
Subject:	Comments for UST Reg Amendment Chapter 173-360
Date:	Friday, May 04, 2012 10:39:06 AM
Attachments:	WSPA comments WA DOE UST Reg Amendments 5 4 12 final PDF.pdf
Importance:	High

Attached - Western States Petroleum Association comment's regarding proposed amendments to Chapter 173-360 WAC, Underground Storage Tank Regulations.

Please confirm receipt. Thank you.

Patty Senecal
Manager, Southern California Region
and Infrastructure Issues
Western States Petroleum Association
310-678-7782

Western States Petroleum Association

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Patty Senecal
Manager, Southern California Region and Infrastructure Issues

VIA ELECTRONIC MAIL

May 4, 2012

Michael Feldcamp
Department of Ecology
Toxics Cleanup Program
PO Box 47600
Olympia, WA 98504-7600

Comments Regarding Proposed Amendments to the Underground Storage Tank (UST) Regulations, Chapter 173-360 Washington Administrative Code (WAC)

Dear Mr. Feldcamp,

The Western States Petroleum Association (WSPA) appreciates the opportunity to comment on the proposed amendments to Washington's Underground Storage Tank (UST) Regulations, chapter 173-360 Washington Administrative Code (WAC). WSPA is a trade association comprised of twenty-seven companies that explore for, produce, refine, transport and market petroleum, petroleum products and natural gas in six western states including California, Arizona, Nevada, Oregon, Washington and Hawaii.

WSPA members own and operate various types of facilities (e.g., oil and gas production properties, refineries, marketing terminals, retail gasoline outlets) that play an important role in the local, state and national economy. WSPA members, as owners and operators of retail gasoline outlets (RGOs), must comply with the myriad of regulatory programs that regulate the operation of RGOs.

WSPA's comments on the proposed amendments are as follows:

37 1. We appreciate the fact that Department of Ecology (DOE) has stated that they are suspending rule making "on topics...being addressed in the current federal rule-making that are not required under the [Underground Storage Tank Compliance Act of 2005]"; however, DOE has not identified which of the topics these are, and the currently proposed rule language clearly does include topics that are identical to those in the current federal rule-making (e.g., those associated with defining the classes of operators, and associated training requirements). WSPA requests that DOE clearly identify which

portions of the rule it is requesting comments on by May 4, and that there will be a later comment deadline for those portions of the rulemaking that have been suspended.

38-39 2. The proposed language of WAC 173-360-810(1), -820(1), and -830(1)(a) applies to new or replacement components (excluding suction piping and piping replacements of less than 50% of a run) installed or replaced after July 1, 2007, meaning that new or replacement components that were installed between then and now that do not meet the specific requirements of the new rule would instantly be found to be noncompliant. We are aware that Washington Substitute Senate Bill (SB) 5475 (which became effective on July 22, 2007) amended the UST law (Chapter 90.76 RCW) that required DOE to

> "adopt rules establishing requirements for all underground storage tanks that are regulated under the federal act, taking into account the various classes or categories of tanks to be regulated...[that] consist of requirements for...groundwater protection measures, including secondary containment and monitoring for installation or replacement of all underground storage tank systems or components, such as tanks and piping, installed after July 1, 2007...."

However, DOE's failure to adopt these specific rules until 2012 should not mean that all new and replacement components (including but not limited to replacement piping) that needed to be installed between July 1, 2007 and now should instantly be found to be noncompliant unless they meet the specific requirements of the new rules. DOE's "Preliminary Cost-Benefit and Least Burdensome Alternative Analyses" has not considered the costs associated with having to replace brand-new piping covered by this rule, and at a minimum, the rule needs to provide a reasonable timeframe for existing systems to comply with the new regulation. Ideally, we would prefer to see references to the July 1, 2007 deadline in the proposed regulation replaced by the effective date of the final rule. If that is impossible (e.g., due to the wording of the amended law), then at a minimum DOE needs to provide existing affected facilities time to comply with the new requirements (especially those involving secondary containment). WSPA is recommending that DOE identify a compliance deadline that is at least 12 months out from the effective date of the final rule.

40 3. The proposed language of WAC 173-360-820(3)(b) requires "a code of practice developed by a nationally recognized association or independent testing laboratory" but only lists Underwriters Laboratories (UL) standards as examples; please add ASME B31.3 and B31.4 to the list of examples.

Thank you for considering our comments. Please contact Patty Senecal (310) 808-2144 if you need additional information or have questions.

Sincerely,

Patty Senecal

From:	TRUMBO, JUSTIN H LtCol USAF DoD AFCEE REO SF/AFLOA/JACE-WR
To:	ECY RE UST Rule
Subject:	DoD Comments to 21 March 2012 Proposed Washington UST Rule
Date:	Friday, May 04, 2012 1:53:41 PM
Attachments:	DoD Comments to WA UST rule.pdf

Dear Sir or Madam:

Attached please find the Department of Defense's comments on the Washington UST Rule proposed March 21, 2012 with a comment period closing 4 May 2012. Thank you for your consideration.

Very Respectfully,

//signed//
JUSTIN H. TRUMBO, Lt Col, USAF
Regional Counsel
Department of Defense Regional Environmental Coordinator, Region 10
AFLOA/JACE-WR
50 Fremont Street, Suite 2450
San Francisco CA 94105
415-977-8840 (Desk)
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justin.trumbo@us.af.mil

DEPARTMENT OF DEFENSE
REGIONAL ENVIRONMENTAL COORDINATOR, REGION 10
50 Fremont Street, Suite 2450
San Francisco, California 94105-2196

2 May 2012

Mr Michael Feldcamp
Department of Ecology/Toxics Cleanup Program
PO Box 47600
Olympia WA 98504-7600

Dear Mr. Feldcamp

As the Department of Defense (DoD) Regional Environmental Coordinator (REC) for the states in U.S. Environmental Protection Agency (US EPA) Region 10, including Washington, and on behalf of all the military services, I am responsible for coordinating responses to various environmental policies and regulatory matters of interest. I appreciate the opportunity to provide comments on the 21 March 2012 notice pertaining to the proposed rules for underground storage tanks (USTs), including the adoption of a new rule providing for a delivery prohibition.

DoD generally supports state-proposed prohibitions on delivery of product into tanks that are in fact ineligible for such delivery. Nevertheless, DoD has identified some issues of concern which are detailed in the enclosed comments jointly prepared by the U.S. Army, Navy, and Air Force. Additionally, the individual military services are currently conducting more detailed technical analyses of Ecology's proposed regulation and may provide additional comments under separate cover.

If you have questions or need additional information, please contact Lieutenant Colonel J.T. Trumbo, Regional Counsel, at 415-977-8840.

Sincerely

ROBERT M. SHIRLEY
Acting DoD Regional Environmental Coordinator
Region 10

Encl:
Comments

DoD's Comments on DoE's Proposed UST Regulations

41 1. The proposed language on the "Appeals" section of WAC 173-360-160 Enforcement should be modified as follows:

(3) **Appeals.** A person subject to an order issued under this chapter may appeal the order to the pollution control hearings board in accordance with RCW 43.21B.310. **Unless otherwise ordered by the Board, the order shall not be effective until the appeal is determined.**

Discussion: Except for orders addressing dangers to public health or the environment, which are provided for in WAC 173-360(1)(b), DoD recommends including the above language so that the right of appeal may be exercised before a delivery prohibition is effective. Without this language, there may be good a faith dispute between the Department and the responsible party over the conditions that gave rise to a delivery prohibition, yet the delivery prohibition could be effective before an appeal is heard. This can have a devastating effect on military operations. For example, some military USTs may be used to store JP-8, a fuel used in military aircraft and armored vehicles. A delivery prohibition could thus halt military operations, force re-routing of critical armament or personnel, or cause other severe national security impacts.

42-44 2. The proposed language in the "Authority" section of WAC 173-360-165, Delivery Prohibition, should be modified as follows:

(1) **Authority.** If the department determines the owners and operators of an UST system are violating any requirement of this chapter or chapter 90.76 RCW, the department may prohibit the delivery, deposit, or acceptance of regulated substances to **a non-compliant tank.**
(2) The department may in its discretion allow deliveries to continue to a non-compliant tank if a delivery prohibition would have a significant adverse effect on a United States Department of Defense military mission or delivery prohibition would increase risk of harm to human health or the environment.

Discussion: DoD recommends including language indicating that the delivery prohibition should only apply to a noncompliant tank and not to all tanks at a facility. DoD also recommends that the state agency be able to exercise its discretion and not apply a delivery prohibition to military tanks in unique circumstances.

On August 7, 2006, the U.S. Environmental Protection Agency (EPA) issued its Grant Guidelines To States For Implementing The Delivery Prohibition Provision Of The Energy Policy Act of 2005 (Guidelines). They in part provide:

A state retains the discretion to decide whether to identify an underground storage tank as ineligible to deliver, deposit, or accept product based on whether the prohibition is in the best interest of the public. In some cases, prohibition of delivery, deposit, or acceptance of product to an underground storage tank is not in the best interest of the public, even in the cases of significant and/or sustained noncompliance (e.g., certain emergency

generator underground storage tanks). In other cases, states may choose to classify an underground storage tank as ineligible to receive product but then authorize delivery in emergency situations. Guidelines, p. 4.

At a typical service station, the public interest may be served by application of a delivery prohibition pending corrective actions because the public has alternative product sources available. By contrast, a military installation and its mission are unique. Installations may have isolated or remote tanks miles apart. If isolated or remote tanks are shut down, military missions may be adversely affected.

In other instances, failure to deliver fuel or withdraw waste oil from a UST may actually result in greater environmental risk or harm. For example, sewage lift stations may have emergency generators fueled by USTs. Prohibiting fuel deliveries could thus cause the lift station to shut down and lead to a sewer system backup. Similarly, oil/water separators with UST waste oil collection tanks must be emptied regularly to operate correctly. Disallowing waste oil to be withdrawn could likewise lead to increased risks to health and the environment.

Accordingly, when considering a delivery prohibition for a tank at a military installation, Ecology should consider the installation's national security mission as well as other environmental risks.

3. Lastly, Ecology has noted the ongoing U.S. EPA rulemaking in the areas of proper operation and maintenance of USTs. As Ecology noted, EPA's comment period closed 16 April 2012. DoD has provided comments on topics addressed in this federal rulemaking and would likewise request Ecology consider those comments in related state rulemaking proceedings. DoD's comments to EPA are available at:
http://www.regulations.gov/#!documentDetail;D=EPA-HQ-UST-2011-0301-0421

In closing, Washington's military bases and training ranges are crucial to supporting our national security mission. DoD therefore respectfully requests Ecology adopt the changes recommended herein.

From:	TRUMBO, JUSTIN H LtCol USAF DoD AFCEE REO SF/AFLOA/JACE-WR
To:	ECY RE UST Rule
Cc:	Feldcamp, Michael (ECY); Blum, Mike (ECY); Hankins, Martha (ECY); Pendowski, Jim (ECY)
Subject:	RE: DoD Comments to 21 March 2012 Proposed Washington UST Rule
Date:	Wednesday, May 16, 2012 10:49:32 AM
Attachments:	DOD UST comments to EPA highlighted.pdf WA UST follow-up 16 may 12.pdf

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Mr Feldcamp:

Sir, attached please find DoD's response to your follow-up questions on our comments. Thank you for your time and attention to this matter.

Sincerely,

-J.T.
JUSTIN H. TRUMBO, Lt Col, USAF
Regional Counsel
Department of Defense Regional Environmental Coordinator, Region 10
AFLOA/JACE-WR
50 Fremont Street, Suite 2450
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justin.trumbo@us.af.mil

-----Original Message-----
From: ECY RE UST Rule [mailto:ustrule@ECY.WA.GOV]
Sent: Tuesday, May 08, 2012 5:57 PM
To: TRUMBO, JUSTIN H LtCol USAF DoD AFCEE REO SF/AFLOA/JACE-WR; ECY RE UST Rule
Cc: Feldcamp, Michael (ECY); Blum, Mike (ECY); Hankins, Martha (ECY); Pendowski, Jim (ECY)
Subject: RE: DoD Comments to 21 March 2012 Proposed Washington UST Rule

Lieutenant Colonel Justin Trumbo,

Thank you for your comments on our proposed amendments to Washington's UST rule.

Problem

In your third comment on page 2 of your submission, you stated the following:

"DoD has provided comments on topics addressed in this federal rulemaking and would likewise request Ecology consider those comments in related state rulemaking proceedings."

We cannot simply accept comments on the proposed federal rule as comments on our proposed state rule. The scope of our rule making is significantly less than the scope of the federal rule making. And to the extent that the rule makings cover the same topics, the proposals are not the same. Consequently, we would have to divine which of your comments on the federal rule might be applicable to our state rule, and to what extent. That would be both infeasible and inappropriate.

Request

Therefore, we respectfully request that you identify by Friday, May 11 which of your comments on the federal rule proposal are applicable to our state rule proposal and include those comments in a separate document. For each of those comments, please identify the section of our state rule proposal to which the comment applies.

Unless you comply this request, we may not be able to accept or address your comments related to the federal rule making.

For your convenience, please find attached our rule proposal.

If you have any questions, please contact me at 36-407-7531 or Mike Blum at 360-407-6913.

Michael Feldcamp, Esq. | Legal and Policy Analyst | WA Department of Ecology | Toxics Cleanup Program | 360.407.7531 P Please consider the environment before printing this e-mail

-----Original Message-----
From: TRUMBO, JUSTIN H LtCol USAF DoD AFCEE REO SF/AFLOA/JACE-WR [mailto:justin.trumbo@us.af.mil]
Sent: Friday, May 04, 2012 1:53 PM
To: ECY RE UST Rule
Subject: DoD Comments to 21 March 2012 Proposed Washington UST Rule

Dear Sir or Madam:

Attached please find the Department of Defense's comments on the Washington UST Rule proposed March 21, 2012 with a comment period closing 4 May 2012. Thank you for your consideration.

Very Respectfully,

//signed//
JUSTIN H. TRUMBO, Lt Col, USAF
Regional Counsel
Department of Defense Regional Environmental Coordinator, Region 10
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DEPARTMENT OF DEFENSE
REGIONAL ENVIRONMENTAL COORDINATOR, REGION 10
50 Fremont Street, Suite 2450
San Francisco, California 94105-2196

15 May 2012

Mr Michael Feldcamp
Department of Ecology/Toxics Cleanup Program
PO Box 47600
Olympia WA 98504-7600

Dear Mr. Feldcamp

Thank you for your email of 8 May 12, wherein you requested DoD "[identify] ... which of [DoD's] comments on the federal rule proposal are applicable to our state rule proposal," and "identify the section of our state rule proposal to which the comment applies." Additionally, you noted "The scope of [Ecology's] rule making is significantly less than the scope of the federal rule making. And to the extent that the rule makings cover the same topics, the proposals are not the same. Consequently, we would have to divine which of your comments on the federal rule might be applicable to our state rule, and to what extent."

At this time, DoD is unaware of the extent to which Ecology's final rule will differ from its proposed rule. Hence, we are unable to predict the extent to which Ecology's final rule may touch on areas now under consideration in the federal rulemaking. To that end, we have enclosed all of DoD's comments to U.S. EPA on the "Proposed Rule Revising Underground Storage Tank Regulations - Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training" for Ecology's consideration.

However, as the Ecology rule is currently drafted, DoD seeks clarification in the following areas: (1) the terms "owner," "operator," "Class A operator," "Class B operator," and "Class C operator," as contained in WAC 173-360-120; (2) the roles of various classes of operators discussed in proposed WAC sections 173-360-10, 173-360-720, 173-360-730, 173-360-740, and 173-360-745; and (3) challenges related to double walled piping, discussed in proposed WAC sections 173-360-810 and 173-860-820. For your convenience, DoD has highlighted its comments on pages 3, 4, and 6 of the enclosed DoD comments to EPA.

Thank you again for your time and consideration of this matter. If you have questions or need additional information, please contact Lieutenant Colonel J.T. Trumbo, Regional Counsel, at 415-977-8840.

Sincerely,

ROBERT M. SHIRLEY
Acting DoD Regional Environmental Coordinator
Region 10

Encl:
Comments

UST-2011-0301
p. 1

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
INSTALLATIONS, ENERGY AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

APR 16 2012

APR 16 2012

U. S. Environmental Protection Agency
EPA Docket Center, EPA West, Room 3334
1301 Constitution Avenue NW
Washington DC, 20460
Attention Docket ID EPA-HQ-UST-2011-0301

Dear Sir or Madam:

This letter provides the Department of Defense (DoD) comments on the EPA Proposed Rule Revising Underground Storage Tank Regulations - Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training . These comments were prepared by the DoD RCRA Services Steering Committee, which represents the Departments of Army, Navy and Air Force, as well as several other DoD Components. We are submitting extensive comments in twenty-five different focus areas.

Our enclosure provides additional detail supporting these concerns and our recommendations. If you have any questions concerning this comment, please contact Mr. Robert Luther, Chair of the RCRA Services Steering Committee, at (703) 697-4032 or email robert.luther2@us.army.mil. On behalf of DoD, I appreciate your consideration of our comments as the final rule is prepared.

Sincerely,

Hewolfe

APR 16 2012

Hershell E. Wolfe
Deputy Assistant Secretary of the Army
(Environment, Safety and Occupational Health)

Enclosure

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

1. **Comments on IV.A.1,**

1.1, page 71712

Comment: Independent administration of training and evaluation is not required to eliminate conflict of interests, and could be interpreeted to prohibit large organizations from having their own qualified training programs not associated with a office or unit which operates any USTs.

Discussion: While required content may be developed independently to prevent conflicts of interest, the administration of courses and tests need not be conducted independently.

Recommendation: Delete the words "and administered .." from this paragraph.

1.2, page 71712

Comment: Clarification is needed on the evaluation component of the training program and who qualifies as independent organization. In the alternative, define "independent" for purposes of this training and evaluation to be organizationally separated from the office or unit that operates the USTs or to which the operators are assigned.

Discussion: Clarification is needed on the evaluation component of the training program and who qualifies as independent organization. In California, e.g., this is applied to the trainer's examination and certification by the International Code Council (ICC).

Recommendation: If the EPA proposed rule applies to all the Class A, B, and C operators, then it may be appropriate to include DOD, Service Components, DLA, and other governmental organization as qualified independent organization to the extent that they are not within the office or unit of the organizational tank custodian.

1.3, page 71715

Comment: The proposed rule is ambiguous in explaining how the operator training requirements will apply when unattended emergency power generator UST compliance is at issue.

Discussion: Unattended emergency power generators do not need the same type of operator training requirements as normally operated USTs. It is unclear if each UST needs to have a Class C operator at the location. This would be difficult at remote locations. The EPA is seeking information about the number of unattended UST facilities in the US (pg 71715). Within DoD there is a large number of unattended emergency power generators and the associated operator training requirement are not reasonably related to the operation of these USTs.

Recommendation: The operator training requirements of emergency power generators should be clarified. Recommend exempting emergency power generators from the operator training requirements.

1.4, page 71712, et al.

65 Comment: Owners and Operators: EPA uses the phrase "Owners and Operators" repeatedly throughout the proposed rule in discussing regulatory responsibilities under under 40 CFR 280 (e.g., 40 CFR 280.10(a), 280.20, 280.20(a)(4)(ii)etc). When EPA employs this general phrase is EPA intending to use "Owners and Operators" as a general expression of inclusion or is something less broad in scope intended?

Discussion: EPA should clarify as a matter of regulatory interpretation what the phrase "Owners and Operators" means in every instance where the phrase is used in the proposed rule. Does EPA mean, for example, "The owner of the facility and all class A, B, and C operators at that facility"? Or, is a more restrictive meaning intended? The current, somewhat conflicting, definitions of owner and operator in the proposed rule are not helpful in clearing up the ambiguity. For example, when EPA uses the general term owners and operators in column one at page 71725 in proposing that annual operation test records be maintained for three years, is EPA holding the official designated as the owner of the installation (e.g., the installation commander) and the class A operator (e.g., the base civil engineer) responsible for the requirement? Or, does EPA intend for all operators to be held equally accountable since EPA employs the plural use of both words?

Recommendation: Edit the proposed rule in a manner that makes clear that the phrase "Owners and Operators" is a term of art with limited application in this rule (i.e., to agency officials tasked with ownership responsibilities [commanders] and to primary plant operators [Class A certified officials]). On the other hand, if EPA is not intending to make a regulatory distinction between owners and classes of operators when using the general phrase, EPA should affirmatively state that so that the regulated community understands owners and class C operators are being held to the same regulatory standard when the generic phrase is used.

66 1.5, page 71714

Comment: Clarify roles of Class A, B, C operators in maintaining compliance

Discussion: EPA has taken the position that at least one class A and B operator at each facility is sufficient. Does this mean EPA contemplates that the vast majority of actual tasks associated with compliance, to include monthly walk through inspections, line and tank integrity testing, etc., can be performed by class C operators? At page 71714, EPA infers that if Class A and B operators are not doing what is necessary to maintain compliance, they may require retraining.

Recommendation: Make clear that while Class A or B designated operators are responsible for maintaining compliance, using class C operators is permissible to perform most (if not all) tasks necessary to compliance.

67 1.6, page 71713

Comment: EPA should not impose a limit on the number of USTs or facilities a Class A or B operator is responsible for.

Discussion: Army National Guard facilities are often small with many facilities spread throughout each state. Most of these facillities do not have a Class A or B operator on site due to facility size and use. Typically the Class A/B operator will be centrally located within a State with responsibility for several facilities. Recurring deployments require that Army National Guard have flexibility to assign operators as the mission dictates. Note, most Army National Guard facilities do not have the fuel throughput that a retail gas station would have so having one operator with responsibility for multiple facilities should not result in less attention to sites.

Recommendation: Do not limit the number of facilities for which an operator may be assignged responsibility.

1.7, page 71712

Comment: Sync proposed rule changes with the Energy Policy Act of 2005, Pub.L. 109-58, Aug. 8, 2005, (the Energy Policy Act) Sec 1524.

Discussion: EPA proposes that: "UST owners and operators must ensure all designated Class A, B, and C operators are trained or successfully complete a

comparable examination according to criteria and within timeframes in the schedule below. " The schedule provides a phased-in approach based on the year the UST was installed. This is different from the 8 August 2012 date published in the EPA Grant Guidelines to States.

The Energy Policy Act, Sec 1524 states that: "State Programs-In General--Not later than 2 years after the date on which the Administrator publishes the guidelines under subsection(a)(1), each state that receives funding under this subtitle shall develop state-specific training requirements that are consistent with the guidelines developed under subsection (a)(1)." EPA developed the 2007 Grant Guidelines to States for Implementing the Operator Training Provisions of the Energy Policy Act of 2005, which states that training must be taken by 8 August 2012. Some states have promulgated regulations consistent with the August 2012 date. However, not all States with RCRA I authority have promulgated their UST training requirements. Typically where states have regulatory authority, the date in the state regulation will be applicable if it is prior to the date set by EPA. Most states have not developed a phased-in training approach (as EPA is proposing). What date will EPA use during a multi-media inspection to determine if an operator is out of compliance with training requirements?

Recommendation: Provide further clarification on EPA's expectation with regard to the training date of 8 August 2012, set forth in the "guidelines" document. Explain if States that receive funding must still ensure operators meet the August 2012 date.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

68 2. **Comments on IV.A.2**

2.1, page 71715

Comment: Challenges related to double wall piping are not adequately addressed.

Discussion: An added difficulty of double wall pipe for bulk piping is detecting where leak or thinning area is located on the pipe for repairs. This places the pipeline out of service for a longer time period and impacts DoD fueling operations.

Recommendation: Add information relative to challenges of double wall piping

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

3. **Comments on IV.B.1**

3.1, page 71718

Comment: Option 1, walk throughs for monitoring/observation wells is not necessary

Discussion: Per 280.41(a)(1)(iv) these methods will be phased out within five years

Recommendation: Delete paragraph requiring monitoring well inspections

3.2, page 71718

Comment: Require walkthrough inspections of USTs every 90 days rather than every 30 days. Allow facilities at least one year after the final rule to program funds and train personnel before requiring compliance with the walkthrough inspections.

Discussion: EPA is proposing walkthrough inspections of USTs every 30 days and is providing a checklist of UST features to inspect. The requirement to conduct inspections every 30 days will be much more labor intensive than the existing 30 day leak detection monitoring requirement and DoD will not be able to meet this requirement immediately after the proposed regulations become final. Leak detection monitoring is typically through remote electronic equipment and results are either transmitted to the UST class B operator electronically, often daily or weekly, or reviewed by the Class C operator. Military facilities may have up to 100 USTs dispersed over a large area, located in remote sites (especially emergency power USTs), or located across multiple states (for the Army National Guard and Army Reserves). Facility USTs typically provide heating or vehicle fuel and are centrally managed by the garrison rather than by the tenant closest to the UST. A military installation has a small number of Class B UST operators. The time to get to each UST, conduct the walk through inspection, and fix deficiencies exceeds the existing labor available in 30 days.

Recommendation: Require walkthrough inspections every 90 days rather than every 30 days. Allow facilities at least one year after the final rule to program funds and train personnel before requiring compliance with the walkthrough inspections.

3.3, page 71718

Comment: Reconsider application of the 30 day walk through requirement to (remotely located) emergency power generator tanks

Discussion: The assumptions made at 76 FR 71720 do not apply to emergency power generators. Deliveries do not occur frequently and dispense filters do not apply. The monitoring requirements that will be mandated are important and necessary but the change does not negate the distance and location of these sites. These tanks should have the proper monitoring equipment installed but the 30 day inspection requirement is excessively burdensome and not necessary when proper monitoring equipment is installed. These tanks have not been demonstrated to present a signficant threat of release or the sources of many past releases to the environment.

Recommendation: Emergency power generators and remote site USTs should either have much less frequent walk through inspections requirements. In the Previously deferred emergency power generators should be exempted or, at least, be on a different and longer walk through schedule than every 30 days.

3.4, page 71720

Comment: EPA asks: "Is it reasonable for owners and operators to begin conducting walkthrough inspections immediately after the final UST regulation becomes effective?"

Discussion: No. Most likely, States with part 280 implementing authority will want to develop their own walk through inspection check list requirements. Owners/operators will also need time to incorporate an inspection checklist into their site specific plans and train staff on what needs to occur. For many organizations walk-through inspections are conducted utilizing contract personnel. Therefore, increasing the frequency of inspections would require changes to existing contracts, which are not currently programmed in agency budgets.

Recommendation: Allow for a 1 year implementation period for these walk-throughs to start, as opposed to right after the rule becomes effective.

3.5, page 71720

Comment: EPA is proposing owners and operators document each area checked, whether each area checked was acceptable or needed to have some action taken, and provide a description of any actions taken to correct an issue.

Discussion: What notification requirement, to the regulatory agency, is associated with this task when corrective action is needed?

Recommendation: Require notification of regulatory agency only if evidence identifies that a reportable release to the environment has occurred.

3.6, page 71718

Comment: EPA provides 3 options for walk through inspections in the proposed rule (see page 71718). Option 1 provides instructions as to what equipment needs to be inspected but does not exactly specify how. Option 2 is to conduct the operation and maintenance inspections according to an industry code of standard. If the PEI/PR1200-12 is determined to be the industry code of standard, it would appear that this option is much more time and labor intensive than an simple "walk through" inspection. As an example, for Release Detection, EPA's option 1 says: "Check any devices such as tank gauge sticks, groundwater bailers, and hand-held vapor monitoring devices for operability and serviceability." EPA does not indicate how to check these devices. If a facility was to use the PEI/PR1200-12 as the industry standard, Page 21 Section 8 (Electronic Monitoring Systems Inspection and Testing) indicates that: To properly evaluate the condition of the ATG probe, the probe needs to be removed from the tank and visually inspected. The document then goes on to describe a functionality test. Performing the described functionality test (to measure operability of the device) appears to be more labor intensive than what would be considered normal for a visual inspection. Functionality tests and other inspections that require removing equipment or probes are better left to more qualified individuals than tank operators

Discussion: The draft "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities" was provided for review along with the proposed rules. The document explains the tests and inspections that should be completed, but it does not explain when these procedures should be performed. It is also not clear which of the inspections described, if any, EPA would expect to be performed during a "monthly walk through" inspection.

Recommendation: EPA provide further clarification on the level of detail needed during monthly "walk through" inspections. EPA also address what sections of the

PEI/PR1200-12 would apply to walk through inspections. The draft PEI/PR1200-12 should also address the frequency at which inspections and tests described in the document should be conducted. Removing probes and other electrical equipment could potentially damage the equipment if the inspector is not particularly familiar with the equipment, so these types of intrusive tests should not be part of the frequent operator inspections.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

4. **Comments on IV.B.2-4**

4.1, page 71720

Comment: The proposal adds small USTs and regulates their O&M the same as large USTs.

Discussion: The addition of small USTs is not necessary. Application of risk-based O&M (e.g. STI categorization of tanks) would better align the UST regs with the AST SPCC rule.

Recommendation: Continue deferral of O&M for small tanks until a risk-based approach is proposed.

4.2, page 71720

Comment: EPA is requesting that testing be done on spill prevention equipment, however there currently is no standard or code of practice for testing this equipment. EPA is suggesting a one year time frame to implement this testing.

Discussion: EPA anticipates that nationally recognized associations or independent testing labs will develop codes of practice. Unless EPA already knows of someone doing this, it doesn't seem reasonable to expect that a 1 year time frame to implement this testing requirement will be sufficient.

Recommendation: Extend the implementation period for this requirement until a code of practice is established and operators are trained on testing.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

5. **Comments on IV.B.3**

5.1, page 71721

Comment: The overfill prevention equipment testing should not be a fixed 3-year interval.

Discussion: This change would be less confusing and therefore better to establish regs that are similar for USTs and ASTs.

Recommendation: Consider the inspection schedule and tank categorization scheme of STI SP001 table 5.5.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

6. **Comments on IV.B.5**

6.1, page 71724

Comment: EPA asks: "Are there additional performance tests EPA should consider?"

Discussion: Rather than additional performance tests for the owner/operator, there is one vital piece that EPA should consider addressing. It is the fuel deliverer. The fuel deliverer seems to have no responsibility or accountability concerning the overfill or spill prevention equipment, yet it is the fuel deliverer who typically has the potential to cause a problem to the UST system. As an example, it has been brought to our attention that some delivery personnel occassionally jam an object down the fill port to hold the fill limiter or flapper open to fuel the tank faster. EPA should consider some way to add accountability to the fuel deliverer with regard to overfill and spill prevention equipment and maintenance requirements.

Recommendation: Consider adding operational requirements to be applicable the fuel deliverers.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

7. **Comments on IV.C.1**

7.1, page 71725

Comment: Implementation timeline may require further evaluation.

Discussion: EPA intends to require phase in of release detection for emergency generator UST(s) within one year of the effective date of the final regulation. Depending on the type of detection equipment, this will be a costly, new requirement with inadequate time to implement. EPA adopted an "all or nothing approach" by simply treating these USTs like any other UST when rolling them into their program.

Many DoD installations have one or more emergency generator USTs. Depending on the host state, these may or may not already include the required equipment for release detection monitoring. For example, a single installation in CNRSE has 10 of these USTs that will require substantial upgrades in order to meet the release detection requirements. Costs of these upgrades would be significant and difficult to cover under current military operating budgets, therefore additional time for budgeting/programming purposes is needed.

Recommendation: Consider a three year rather than a one year phase-in period to accommodate the regulated community's budgeting and programming processes.

Apply these comments to regulation related to emergency generator USTs in section 280.1

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

8. **Comments on IV.C.2**

8.1, page 71726

Comment: Definition of Airport Hydrant Systems as regulated UST systems is unclear.

Discussion: Typical DoD Hydrant fueling systems are composed of aboveground storage tanks and underground piping (under aircraft parking areas). Definition would include piping to "intermediary" tanks, but does not describe if intermediary tanks are USTs or ASTs. Also, does piping entering intermediary tanks count as part of the 10% of underground piping. It is not part of hydrant piping, thus, should not be included.

Recommendation: Clarify definition of Airport hydrant piping and associated piping with intermediary tanks including type of intermediary tanks (UST, AST).

8.2, page 71726

Comment: Three year implementation period to meet the requirement for leak detection of all Air Force Fuel hydrant systems is impracticable.

Discussion: Proposed leak detection upgrade of existing hydrant systems will impose large added cost burden that will be difficult to accomplish in three year time frame. Shutting down DoD Fuel Hydrant systems will impact DoD flying missions and ultimately threaten National Security.

Recommendation: Recommend extension of implementation period to three years based on DoD ability to program and implement system upgrades

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

9. **Comments on IV.D.4.**

9.1, page 71739

Comment: Owners and operators must maintain the following records (according to Sec. 280.34) for the life of the equipment or component: [cir] Documentation of compliance with the above section as applicable; and Permanent 'for the life of the equipment or component' Records of all equipment or components installed or replaced after the effective date of the final UST regulation. At a minimum, each record must include the date of installation or replacement, manufacturer, and model.

Discussion: Management of permanent records of repair and maintainance activities, confirming compatability, will be time consuming, costly, and likely always incomplete. This requirement will be manpower intensive. For each installation the tanks impacted likely are maintained by a contractor and scattered across the installation.

Recommendation: 1. Implement this requirement only at those tank locations where a reportable release attributed to compatability has occurred. 2. Another recommended option to explore could be a sealable/lockable (lockout tag-out) log book attached to all tank systems listing all maintenance and repair activities. These options or a combination of them should save time, money, and ensure protection of the environment.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

10. **Comments on IV.D.6**

10.1, page 71742

Comment: Improper paragraph of regulation is referenced for vapor and g-w monitoring VS. phasing-out paragraph

Discussion: 5-year phasing out period is not mentioned in 280.43

Recommendation: Refer to para 280.41(a)(1)(iv) which phases out these methods.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

11. **Comments on IV.E.1**

11.1, page 71744

Comment: Section discusses that "EPA considers a cladding to be a non-corrosive dielectric material, bonded to the steel tank with sufficient durability to prevent corrosion during the tank's life." It is inferred that cathodic protection is not needed when such cladding is used.

Discussion: Cladding provides durable barrier from the soil/water to prevent corrosion. Thus, cathodic protection should not be required.

Recommendation: Include discussion that cathodic protection is not needed when cladding is used.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

12. **Comments on 280.10**

12.1, page 71762

Comment: Ramifications of removing the Wastewater treatment tank deferral include potential for confusion and time spent by both the regulated community and implementing agencies in interpreting whether this section applies to specific wastewater treatment units.

Discussion: In the preamble, page 71736, EPA indicates the intent to regulate oil-water separators, where these are not part of a CWA regulated facility. However, because the experts that EPA contacted were unable to identify any specific equipment that treats wastewater other than within the context of CWA regulated discharges, EPA has not specified performance and design standards that would be appropriate for such equipment. Application of the existing UST design standards would be inappropriate. For example, the piping entering and exiting such separators contains water, not oil, and therefore requiring secondary containment and leak detection would clearly be an excessive measure, however literal interpretation of Part 280.20 might require this.

Recommendation: EPA either (1) continue the deferral of underground wastewater treatment tanks not regulated under the Clean Water Act, or (2) if EPA intends to immediately address this deferral, then for clarity and practicality the regulation should have some additional changes as follows:

The word "underground" should be added preceding "wastewater treatment tank systems" in the proposed 280.10(a) (1).

Paragraph 280.10(b) (2) should be expanded by listing, in a footnote, common types of wastewater treatment devices that are typically regulated under Section 402 or 307(b) of the Clean Water Act and thus would typically be excluded from Part 280 requirements. The listing might include:

- Food service wastewater grease traps or interceptors installed underground that connect to a sanitary sewer;

- Oil/water separators installed underground that are part of an industrial waste water treatment plant or otherwise send their treated aqueous stream for further treatment by an NPDES regulated wastewater treatment facility;- Oil/water separators installed underground that treat storm water regulated under the National Pollutant Discharge Elimination System.

-Address the regulatory status of an oil water separator (OWS) that is used to meet 40 CFR 112 requirements for general secondary containment, sized secondary containment, or facility drainage. In some cases, the OWS may not discharge to waters regulated under the CWA.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

13. **Comments on 280.10**

13.1 280.10(c)(1)&(i) Deferrals, page 71762

Comment: The wording of Section 280.10(c) is confusing because it is not immediately clear that EPA is deferring certain ASTs rather than field constructed USTs. Also only certain ASTs are deferred as indicated in the definition of the airport hydrant fuel distribution systems. Please provide clarification on the boundaries of these systems.

Discussion: Improve clarity of the regulation.

Recommendation: Recommend combining 280.10(c)(1) and subparagraphs (i) and (ii) so that 280.10(c) is as follows: "(c) Deferrals. Subparts B, C, D, E and G of this part do not apply to: (1) Aboveground tanks that are associated with either (i) UST systems having field constructed tanks, or with (ii) Airport hydrant fuel distribution systems, but separated from hydrant piping by an intermediary tank or tanks. (2) Any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954."

13.2 280.10(b)(5) and 280.12, Definitions, page 71762

Comment: Provide a definition for "de minimis concentration of regulated substances" as used in Section 280.10(b)(5).

Discussion: Section 280.10(b)(5) indicates that any UST system that contains a "de minimis concentration of regulated substances" is excluded from the requirements of Part 280, however, de mimimis concentration is not defined.

Recommendation: Provide a definition for "de minimis concentration of regulated substances" as used in Section 280.10(b)(5).

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

14. **Comments on 280.12, Definitions**

14.1, page 71762

Comment: Explanation of standard tank and piping integrity terminology would be helpful. Part 280 uses a number of industry standard terms related to tank and piping integrity protection and testing, but these terms are not included among the definitions or otherwise explained. This may make the regulation less readily understandable to inexperienced readers.

Recommendation: Consider adding either definitions for terms such as "tank tightness test" and "line tightness test" or adding some explanatory notes differentiating among terms such as line leak detection, line tightness testing, integrity testing, tightness testing, and leak testing.

Discussion: EPA intends to rely on training of Class A and B operators to help ensure compliance including proper testing and release detection of tanks and piping. In addition to requiring trained Class A and B operators, Part 280 regulations and EPA supporting materials should be made as accessible and understandable as possible to help the regulated community.

Recommendation: Include explanation of tank and piping integrity terms in the definitions.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

15. **Comments on 280.20(a)(6)**

15.1, page 71764

Comment: The preamble (pages 71733 – 34) addresses field constructed tank standards and indicates EPA considers current military construction standards appropriate to sufficiently address field-constructed tank design and construction. This discussion is absent from the regulatory text however.

Discussion:

Recommendation: Incorporate into the regulatory text the reference made in the preamble to military construction standards for field-constructed tanks.

In the Note to paragraph 280.20 (a)(6), add an additional subparagraph (F) as follows: "(F) For field-constructed tanks on military installations, United Facilities Criteria (UFC) 3–460–01, "Petroleum Fuel Facilities" or successor documents."

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

16. **Comments on 280.32**

16.1, page 71767

Comment: Add certification by a registered professional engineer as an additional option for certification of tank systems for storage of fuel blends containing greater than 10 percent ethanol or greater than 20 percent biodiesel, or other regulated substances.

Discussion: Increase flexibility in means available for documenting compatibility of USTs with unusual fuel blends or other regulated substances.

Recommendation: Suggested wording:

Renumber the current paragraph 280.32(b)(3) as 280.32(b)(4).

Add the following as 280.32(b)(3):

"Certification by a registered professional engineer that the tank system and components are compatible with the fuel blend or regulated substances to be stored. The certification must be accompanied by a report documenting each of the materials of construction of the tank system and components, and the basis for the determination of compatibility."

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

17. **Comments on 280.34(b)(9)**

17.1, page 71768

Comment: Meaning of "recent" compliance is not clear.

Discussion: The word “recent” does not contribute to understanding the release detection recordkeeping requirements of Section 280.45, however there should be some clear and reasonable limit on this reporting requirement. The recommended change will promote clarity and uniform interpretation between implementing agencies.

Recommendation: Recommend deleting the word “recent” and adding instead “since the last report”, so that 280.34(b)(9)simply reads:

“Compliance with release detection requirements (§ 280.45) since the last report;”

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

18. **Comments on 280.35**

18.1 280.35 (a)(2), page 71768

Comment: The overfill prevention equipment testing should not be a fixed 3-year period

Discussion: The spill prevention equipment testing should use risk-based timeframes, like the industrial standard for inspecting/testing ASTs.

Recommendation: eliminate the three-year testing requirement in favor of 280.35(a)(1)(ii)(A-C) [assumes a risk-based industrial standard exists].

Also apply comment to 280.36 (a)(1)(ii), (a)(2)(ii) & (a)(3)(ii)

18.2 280.35(a)(2), page 71768

Comment: Improve clarity of the regulation.

Discussion: Since 280.35(a)(1)(ii) itself refers to testing of spill prevention equipment rather than overfill protection equipment, at casual reading the reference back to section (a)(1)(ii) seems incorrect.

Recommendation: At the end of 280.35(a)(2), recommend revising the sentence "Testing must be conducted in accordance with one of the criteria in paragraph (a)(1)(ii) of this section," to read:

"Testing must be conducted in accordance with one of the criteria in paragraph (a)(1)(ii)(A), (B), or (C) of this section.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

19. **Comments on 280.36**

19.1 280.36(a)(3)(ii), page 71769

Comment: Sump testing should occur every 5 years vice every 3 years

Discussion: Current state programs (e.g. Maryland) already include sump testing requirements every 5 years, with the third party inspection occurring every three years. This frequency is sufficient in Maryland to limit releases from sumps and would cost less for the owner over time.

Recommendation: Change from "The containment sump is tested at least every three years.." to "the containment sump is tested at least every five years..."

19.2 280.36(c)(2), page 71769

Comment: Clarity of the regulation could be improved

Discussion: "As appropriate" is ambiguous in that it could be referring either to "appropriate" records or used to mean "as appropriate to the methods of leak detection used." In the event that EPA is referring to appropriate records, clarification by examples of the kinds of records that would be acceptable would be helpful.

Recommendation: Rewording 280.36(c)(2) to change "As appropriate" to "As applicable based on detection methods used." The revised paragraph 280.36(c)(2) would then read:

"(2) As applicable based on detection methods used, records demonstrating: the tank is using continuous interstitial monitoring; the piping is using continuous interstitial monitoring with vacuum, pressure, or liquid-filled interstitial space; and the containment sump has two walls and uses continuous interstitial monitoring. ..."

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

20. **Comments on 280.37**

20.1, page 71770

Comment: Walkthrough inspections should not be required every 30 days for remote unmanned power generator USTs.

Discussion: The EPA argues that advances in remote monitoring technologies have made the exemptions for remote emergency power generator USTs unecessary and that these USTs should now be subject to the same rules as all regulated USTs. While this may be acceptable when considering monitoring, it is impracticable when implementing EPA's newly proposed walkthrough inspection requirements. Frequent inspections at remote, high security, unmanned sites (e.g. missile launch sites) would cause undue burden to comply and are not necessary for environmental protection. EPA's minimum inspection list of items, 280.37 (a)(1)(i - vi), clearly apply to fuel dispensing sites much more appropriately than to emergency generator sites.

Recommendation: Change remote unmanned emergency power generator USTs from 30 day walk through inspections to 90 days or longer, to a frequency demonstrated as necessary to conditions at these types of sites.

20.2 280.37(a)(1)(v), page 71770

Comment: Comment: Recommend that EPA separately address impressed current cathodic protection systems and sacrificial anode cathodic protection systems.

Discussion: Having operator check every thirty days for a three year test record (for sacrificial anode cathodic protection) would cause the operator to de-value the importance of the checklist, since this will obviously not change for 35 consecutive checks

Recommendation: Either delete the check for sacrificial anode systems, or reduce the frequency. Suggested wording:

"For systems where cathodic protection is provided by impressed current, check to make sure impressed current cathodic protection rectifiers are on and operating, and ensure records of 60 day impressed current system inspections are reviewed and up to date; for systems where cathodic protection is provided by sacrificial anodes, once per

year check to ensure records of three year cathodic protection testing are reviewed and up to date."

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

21. **Comments on 280.43(e) & (f)**

21.1, page 71773

Comment: Improper paragraph is referenced to vapor and g-w monitoring VS. phasing-out paragraph

Discussion: 5-year phasing out period is not mentioned in 280.43.

Recommendation: Refer to para 280.41(a)(1)(iv) which phases out these methods.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

22. **Comments on 280.240, and Part 281 Approval of State UST Programs**

22.1, page 71783

Comment: EPA will be the implementing authority for Part 280 in several jurisdictions where the state has not been delegated authority; therefore EPA will be responsible for oversight of operator training.

Discussion: EPA expresses concern about the schedule and availability of training programs. EPA can alleviate this potential problem by standardizing curriculum and establishing a comparable examination process for EPA administered jurisdictions. Encouraging state reciprocity agreements will further reduce the compliance burden on the regulated community.

Recommendation: EPA should separately propose, before this rule is finalized, either a detailed minimum federal curriculum, or criteria to determine the suitability of any training provider or curriculum for training of Class A and Class B operators. In order to meet the statutory intent of EPACT 2005, EPA should take into account existing state and third party UST operator training programs. We recommend EPA accept comments on a proposed curriculum and/or proposed criteria to determine the suitability of a training provider or curriculum.

EPA should provide and administer (through approved third parties) a comparable examination per 280.242(e) for Class A and B operators in jurisdictions where EPA is the implementing agency.

EPA should promote standardization and reciprocity agreements between state training programs; one approach would be for EPA to require in section 281.39, as a condition of delegation of authority that states identify content in their training program that exceeds the federal minimum and where the differences are minimal encourage the state to provide a comparable examination process for upgrading and approving any individual already qualified in a federal EPA administered jurisdiction.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

23. **Comments on 280.242(d) & (e)**

23.1, page 71772

Comment: Independent administration of training is costly.

Discussion: Large organizations are capable of adminstering such training with organic capabilties, at much less cost.

Recommendation: Delete the words "and administered .." from paragraphs (d) and (e).

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

24. **Comments on 280.243(b)**

24.1, page 71784

Comment: A 30 day window is not realistic for procuring outside/3rd party services for federal facilities. For military operations with the potential for personnel deployments at any time, a period of 60 days or longer is more feasible to allow newly assigned personnel to complete their training, while carrying out other duties they have at their unit.

Discussion:

Recommendation: Extend retraining date for existing and training for newly assigned Class A/B operators to within 60 days of assuming duties vice 30 days.

Department of Defense Comments on EPA Proposed Rule for Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training

25. **Comments Throughout Document**

25.1

Comment: Throughout the document, for example 280.35 (a)(1)(i) on page 71768 vice 280.42(b) on page 71772.

The terms "double-walled" and "two-walls" are used throughout the document, but refer to the same thing.

Discussion: The term "two-walls" is not an industry standard term and can easily be confused with any two walls of the tank.

Recommendation: Change the term "two-walls" to "double-walled"

25.2

Comment: Request EPA provide sample calculations to illustrate the tank and piping volumes for all scenarios to determine what is regulated via AST vs. UST regulations.

Discussion: Example calculations would provide clarity in understanding how EPA will apply regulations.

Recommendation: EPA provide sample calculations to illustrate the tank and piping volumes for all scenarios to determine what is regulated via AST vs. UST regulations.

25.3

Comment: The regulation of oil water separators (OWSs) subject to all UST regulatory requirements will be costly and of limited, if any, environmental benefit.

Discussion: Historically, OWS's have been deferred from UST regulation. EPA is proposing to regulate new and replaced OWS's as fully regulated USTs including requirements for double-walled tanks and piping and interstitial monitoring (in addition to the rest of the UST regulations). EPA did not provide an explanation and/or justification for eliminating this exemption, other than stating this is proposed in order "to protect human health and the environment". Does EPA have information that OWS's are a significant source of releases? The nature of OWS's (i.e., water containing) and based

on DoD's historic experience of OWS's indicates that they are extremely low risk for releases that are of any significance to the environment. The economic cost to meet fully regulated UST requirements does not seem to be justified in EPA's discussion.

Recommendation: EPA reconsider this proposal and retain the exemption of OWSs from the general UST requirements. If some level of regulation is retained under this rule, it should be very limited and reasonably related to the risk of releases from OWSs that have the potential to cause significant harm to the environment.

From:	Bob Wiese
To:	ECY RE UST Rule
Cc:	Remy P. Cano; Erik G. Snyder
Subject:	Comments from NW Tank
Date:	Friday, May 04, 2012 1:56:03 PM

Please accept these comments as a collective response from Northwest Tank & Environmental Services, Inc.

- Definitions
  - 45 EPA has not defined "Continuous Monitoring" for interstitial space. These proposed rule changes also do provide a definition for this. However, this definition will be crucial in determining which systems will be required to conduct hydrostatic testing of secondary containment once the new EPA rules are passed.
    - WAC 173-360-820 (4)(c) mentions examples of continuous monitoring but a clear definition is needed to eliminate any ambiguity in rule interpretation.

- WAC 173-360-810 /820(1) *Tanks installed or replaced after July 1, 2007, must be secondarily contained and monitored for releases in accordance with the requirements in this section.*
  - 46 Does this mean Interstitial Monitoring (IM) must be the Primary source of release detection for tanks and piping? We understand they must be monitored, but will an operator still have the option to use IM as secondary and another approved form of monthly monitoring as the primary?
  - 47 Will annual line test still be allowed as a primary leak detection method for sites newer than 2007?

- 48 WAC 173-360-820 (3) *In addition to meeting the requirements in WAC 173-360-305(2), piping must meet the secondary containment requirements in this subsection.*
  - Does this include piping located at a marina extending from the transition sump to the dispensers on the dock?

Respectfully submitted,

--
Bob Wiese
Northwest Tank & Environmental Services, Inc.
800-742-9620 ext 102
509-255-6705 Direct Line
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Integrity, Loyalty, and Service

From:	cami
To:	ECY RE UST Rule
Subject:	Annual Trainings & Inspections
Date:	Friday, May 04, 2012 2:54:50 PM

To Whom It May Concern,

49-51 Being a veteran in the petroleum businesses, I am no stranger to working with various parties who dispense gas and the like. I feel it imperative to carry out our duty to require all owners, operators, managers, etc. to receive annual training.

Our number one priority is safety for our communities and the environment. There are many loopholes in our system and it seems cheating, by not following training protocols, has become the new normal to save money during these hard economic times. Training protocols that were put in place to serve as enforcement of the law. It now falls on the shoulders of our trainers, who are already struggling to stay in business, due to the lack of work because of lenient requirements. It seems as if the lack of environmental and safety protocols has taken a back seat and become a low priority.

Mandatory annual trainings and inspections would create a more efficiently run outfit. A statewide database would also lend to the candor of the certification process that you yourselves created. This would allow The Department of Ecology to remain an institution of integrity and a beacon of environmental and public safety. It is important for the future.

Thank you for your time.

Julia Taffee

From:	Beam, Thomas G
To:	ECY RE UST Rule
Cc:	Clement, Curt J; Jackson, Dale E; Beam, Thomas G; Peterson, Kirk A
Subject:	Comments on Proposed Revision to WAC 173-360 "Underground Storage Tank (UST) Regulations"
Date:	Friday, May 04, 2012 3:29:47 PM
Attachments:	final Hanford comment package-WAC 173-360 rule revision.docx

Mr. Michael Feldcamp
Toxic Cleanup Program
State of Washington
Department of Ecology

Dear Michael,

Attached for your consideration, in accordance with Washington State Register (WSR) Item 12-07-084 (dated 3/21/2012), are comments on Ecology's proposed revision of WAC 173-360 "Underground Storage Tank (UST) Regulations". Mission Support Alliance (MSA), in cooperation with the U.S. Department of Energy (DOE) and other Hanford Site contractors, is submitting these comments as DOE's integrating contractor on the Hanford Site.

The changes suggested by our comments should provide additional clarification and streamlining to help the regulated community maintain compliance with this rule. We look forward to receiving Ecology's responses to our comments. If you have questions or would like to discuss any of them further, please contact Mr. Curt Clement of my staff, who is our UST subject matter expert, at 509-376-6223 or via email at curt_j_clement@rl.gov. Thanks.

Sincerely,

Tom Beam, Manager
Site-wide Permits, Policy and Reports
MSA Environmental Integration

PS. Reply confirmation of your receipt of these comments to meet Ecology's 5/4/2012 deadline would be much appreciated. Thanks.

Comment Number	Proposed Rule Section/Citation	Comment	Recommended Action(s)/ Requested Change(s) *(Proposed text additions; proposed text ~~deletions~~)*
Hanford-01 52	WAC 173-360 General	The proposed new rule language uses the term “UST facility” extensively. However, the term “UST facility” is not defined in WAC 173-360-120. Instead, WAC 173-360-120 includes a definition for the term “UST site”, which does not appear to be used anywhere within the rule. This lack of consistency creates unnecessary confusion that will make it more difficult to accurately and effectively comply with the rule requirements.	For clarity and consistency, revise the proposed rule language throughout WAC 173-360 to replace all uses of the undefined term “UST facility” with the defined term “UST site”.
Hanford-02 53	WAC 173-360-120	The proposed definition of “Red tag” is overly restrictive with respect to its application to a waste/used oil UST system.. Since the primary purpose behind the concept of a “red tag” appears to be the clear identification of noncompliant tanks, it doesn’t make sense to eliminate the ability to remove the waste/used oil from the tank. It would be preferable to be able to remove the waste/used oil to minimize potential leaks.	Revise the proposed definition of the term “Red tag" in WAC 173-360-120 to read as follows: *“Red tag” means a red-colored tag or device on the fill pipe of an UST system that clearly identifies the system as ineligible for product or oil (used or waste) delivery ~~or waste oil withdrawal~~. The tag or device is tamper resistant and is easily visible to the ~~product~~ deliverer ~~and persons withdrawing waste oil~~. The tag or device clearly states and conveys, as applicable, that it is unlawful for regulated substances to be delivered or deposited into an UST system ~~or withdrawn from a waste oil UST system~~.*
Hanford-03 54	WAC 173-360-120	The proposed addition of a definition for the term “Temporarily closed UST system” creates a potential regulatory conflict with the provisions of WAC 173-360-380 that allow for temporary closure of an UST system as an interim step toward full and final closure, even where there is no intention to return the UST system to service in the future. This is an unnecessary restriction with no apparent added benefit; especially since it does not relate to any of the new proposed rule language.	Delete the proposed definition of the term “Temporarily closed UST system” in WAC 173-360-120.

Comment Number	Proposed Rule Section/Citation	Comment	Recommended Action(s)/ Requested Change(s) *(Proposed text additions; proposed text ~~deletions~~)*
Hanford-04 55	WAC 173-360-120	The proposed definition of "Facility compliance tag" is overly restrictive with respect to its application to waste/used oil UST systems. Since the primary purpose behind the concept of a "Facility compliance tag" appears to primarily be the clear identification of the overall UST compliance status for a site, it doesn't make sense to eliminate the ability to remove the waste/used oil from individual tanks/systems. It would be preferable to be able to remove the waste/used oil to minimize potential leaks, especially in those situations where those UST systems may be the ones which are noncompliant. In addition, consistent with prior comments, the use of the word "Facility" in this defined term should be replaced with the word "Site."	Revise the proposed definition of the term "Facility compliance tag" in WAC 173-360-120 to read as follows: *"Site ~~Facility~~ compliance tag" means a white-colored metal plate with a green-colored identification number issued by the department for display at an UST site ~~facility~~ in a location clearly visible to the product or oil (used or waste) deliverer ~~and persons withdrawing waste oil~~. Except as otherwise provided in this chapter, it is unlawful for regulated substances to be delivered or deposited into an UST system, ~~or withdrawn from a waste oil UST system~~, at an UST site ~~facility~~ without a valid and properly displayed site ~~facility~~ compliance tag.*
Hanford-05 56	WAC 173-360-165(5)	Consistent with the comments above related to the definitions for the terms "Red tag" and "Facility compliance tag", it does not make sense to restrict the withdrawal of waste/used oil from a noncompliant UST that is subject to delivery prohibitions. Allowing the waste/used oil to be removed may enhance protection of the environment by minimizing the potential for leaks.	Delete the proposed new rule language in WAC 173-360-165(5).

Comment Number	Proposed Rule Section/Citation	Comment	Recommended Action(s)/ Requested Change(s) *(Proposed text additions; proposed text ~~deletions~~)*
Hanford-06 57	WAC 173-360-700(2)	The proposed new rule language requiring owners/operators to comply with training requirements during periods of temporary UST closure impose an unnecessary burden on the regulated community, with no additional benefit to or protection of the environment. If an UST is temporarily closed, and no longer receiving a regulated substance, having personnel trained to the same level as required for an operating UST is unnecessary. Ecology has previously indicated that it has suspended rulemaking activities for changes that exceed existing laws or federal rules. Consistent with that policy, imposing additional requirements that go above and beyond the required federal requirements should be avoid unless absolutely necessary to maintain program delegation. Based on our review, there do not appear to be any requirements in the associated federal rules (Reference: 76 FR 71763, dated 11/18/2011) mandating training for temporarily closed USTs.	Revise the proposed new rule language in WAC 173-360-700(2) to read as follows: *Owners and operators of UST systems shall continuously comply with the requirements of this part from their installation until their temporary or permanent closure or change-in-service~~, including during any period of temporary closure~~.*
Hanford-07 58	WAC-173-360-730(1)(a)	The currently identified Ecology-approved third party training programs (as listed on the Ecology website) are heavily focused toward the retail and commercial petroleum distribution and sales industry. Large federal installations (i.e. non-commercial owner/operators) such as the Hanford Site frequently establish internally-developed training programs for purposes of meeting regulatory requirements to ensure unique factors and scenarios are adequately addressed. The proposed rule language does not clearly provide the flexibility for individual owner/operators to develop and administer their own training program that meets the stated requirements.	Revise the proposed rule language in WAC 173-360-730(1)(a) as follows: *Is developed and administered by the department or an independent third-party approved by the department, or for non-commercial owners/operators, a training program developed by the owner/operator and approved by the department;*

Comment Number	Proposed Rule Section/Citation	Comment	Recommended Action(s)/ Requested Change(s) *(Proposed text additions; proposed text ~~deletions~~)*
Hanford-08 59	WAC 173-360-730(2)	Implementation of a new comprehensive training program, as mandated by this new proposed rule language, represents an additional significant burden to the regulated community. In many cases, owner/operators are already implementing numerous related training programs (e.g. various EPA/OSHA/WISHA programs) for employees that address similar subject material and knowledge that could readily be used in place of a new training program, and provide a more cost-effective solution. Ecology needs to recognize and allow for this in the proposed rule language.	Revise the proposed rule language in WAC 173-360-730(2) to include a new sub-paragraph (d) that reads as follows: *(d) Completion of 24-hour or 40-hour Hazardous Waste worker training per 29 CFR 1910.120(e), training under WAC 296-67, OSHA Process Safety Management training per 29 CFR 1910.119, or Spill Prevention, Control and Countermeasures training under 40 CFR 112 is considered equivalent training for Class C operators to satisfy this section.*
Hanford-09 60-61	WAC 173-360-810, -820 & -830	The proposed new rule language in the applicability statements for each of these sections makes the various containment and performance requirements for tanks, piping, etc. retroactive to all UST systems installed or replaced after July 1, 2007. This is an unreasonable and burdensome requirement on the regulated community that will require the expenditure of significant resources without the benefit of any reasonable implementation timeframe. Although it is recognized that the requirements are taken directly from RCW 90.76.020 to comply with the federal underground storage tank compliance act of 2005, it must be noted that the July 1, 2007 date reflected the compliance date from the federal legislation enacted prior to that date. It is unreasonable for Ecology to delay its development of corresponding state rules for an extended period of time and then retroactively apply a compliance date just to appear consistent with the federal requirements.	Revise the proposed rule language in WAC 173-360-810(1), -820(1) and -830(1) to provide an appropriate implementation timeframe for regulated systems to come into compliance with these new regulations.

Comment Number	Proposed Rule Section/Citation	Comment	Recommended Action(s)/ Requested Change(s) *(Proposed text additions; proposed text ~~deletions~~)*
Hanford-10 62	WAC 173-360-830(1)	The proposed new rule language in this section does not clearly and unambiguously state that these requirement are applicable only to those UST systems that include a dispenser system, not all UST systems.	Revise the proposed rule language in WAC 173-360-830(1) to read as follows: *UST systems that include dispenser systems must be equipped with under-dispenser containment meeting the requirements of this under…*

From:	Paul & janet
To:	ECY RE UST Rule
Subject:	UST training rules
Date:	Friday, May 04, 2012 3:36:32 PM
Importance:	High

Mr. Michael Feldcamp,

This is regarding the new UST training rules. I have issues that I'd like to address.

63-64 I have been in the retail gasoline industry for almost 30 years, and have seen the issues that can occur with UST's, etc. Training has been a yearly requirement by our company, but this isn't part of the Department of Ecology requirements. Because of this, it is extremely hard to make our dealers/franchisees stay in line with the requirements. We also have legal franchise laws that do not allow us to enforce these training rules.

The only way we can keep them in line is to have the state require yearly training etc.

Now that Washington has an opportunity to make things easier for companies enforce, and more importantly help the environment, I hope that you'll take advantage of it. Compliance training cannot be a once in a lifetime event.

Thank you,

Paul Struthers

Appendix C

Transcripts of Public Hearings

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Call you up in order of your cards. Is this on? Okay. Okay. I am Mary Ausburn, Hearings Officer for this meeting. We are conducting a hearing on the proposed amendments to Chapter 173-360 WAC Underground Storage Tank Regulations. Let the record show that this meeting started at 1:35 PM on April 24, 2012, and this hearing is being held at Department of Ecology, Eastern Regional Office, 4601 North Monroe Street, Spokane, Washington 99205.

Legal notices of this hearing were published in the *Washington State Register* on April 4, 2012, WSR number 12-07-084. In addition, notices of the hearing were mailed to about 5,000 people affected by or otherwise interested in the rule making, including registered UST owners and facilities, service providers, operator training providers, business and local government associations and environmental groups. Email notices were also sent to about 75 interested people and a news release was issued on March 27, 2012. Okay, that concludes the recording section, for testimony, Jerry Piper. No, no more questions, okay. John Hanson? Okay. Bud. Okay, all right. Jason? Nope. Grant? Okay.

The let the record show that about five people attended this public hearing, no one wanted to provide oral testimony. So if you would like to submit comments later on, written or otherwise, you have until May 4, 2012. Testimony provided at this hearing, which there wasn't any – and the hearing is held in Yakima on April 25th, Bellevue on April 26th, Lacey on April 27th will be part of the public hearing record.

Ecology will prepare and send notice of a concise explanatory statement to everyone that's provided testimony or signed up and provided contact information. The concise explanatory statement will basically respond to questions and issues of concern that were raised during this meeting.

And the next steps, once the hearings are concluded, our Director for Ecology, Ted Sturdevant, will consider the rule documentation and staff recommendations and make a decision for adopting the proposal or not. Adoption is scheduled to not occur earlier than June 27, 2012, and if it were to be approved and sent to the code reviser on that date, it would go into effect 31 days later.

So with that, thank you for being here and providing input, and if you have any questions you can certainly talk to staff before you leave. Let the record show, then, that the hearing is adjourned at 2:12 PM, April 24, 2012.

[End of Audio]

[Testing recorders.] Record, there we go. This one's recording too, yeah.

Tim Hill: I am Tim Hill, Hearings Officer for this hearing. This afternoon we are to conduct a hearing on the proposed amendments rule proposal for Chapter 173-360 WAC Underground Storage Tank Regulations. Let the record show that it's 3:04 on April 25, 2012, that's 3:04 PM. And this hearing is being held at Department of Ecology, Central Regional Office, 15 West Yakima Avenue, Yakima, Washington 98902.

Legal notices of this hearing were published in the *Washington State Register* on April 4, 2012; the number is WSR number 12-07-084. In addition, notices were mailed to about 5,000 people affected by or otherwise interested in the rule making, including registered UST owners and facilities, service providers, operator training providers, businesses and local government associations and environmental group. UST stands for underground storage tanks. Email notices were also sent to about 75 interested people, and a news release was issued on March 27, 2012.

I will be calling people up to provide oral testimony based on the order you signed in. We have one person who has requested to speak. After he speaks I will ask again if anybody else would like to speak, and if so, we will allow them to speak, or welcome them to speak. I will – when I'm ready to go, I will pass the recorder over to the first speaker and he will begin. We will begin with Rod Smith and once he's done, again, I will ask if anybody else wishes to provide testimony.

Rod Smith: Okay, my name is Rod Smith; I represent RH Smith Distributing Company, a marketer of fuel here based in Grandview. Also I represent the Washington Oil Marketers Association, which is based on the west side and is headed by Lea Wilson. The issues I have are with Section 720 regarding Class B operators. These would most likely be store managers, and I think the compliance date of 60 days, or compliance schedule of 60 days after a Class B operator starts is too short. I think that should be an extra 30 days for a total of 90 days. Managers have an awful lot to do when they start and I think that timeframe is too short.

Also Section 720, this is regarding Class A operators, I believe there needs to be a better system in place for new owners of an existing convenience store or a retail fuel site. A licensing process similar to the way that they get their cigarette license or their alcohol license would be highly recommended, this way they

would not be allowed to sell fuel before they are actually trained and have a Class A license. Thank you.

Tim Hill: If you would like to submit written comments to Ecology, please remember that they are due on May 4, 2012. This information is also available on the handouts provided tonight. Send them to Michael Feldcamp, Department of Ecology, Toxics Cleanup Program, PO Box 47600, Olympia, Washington 98504-7600. You can email them to USTRule, which is USTRule@ecy.wa.gov. You can fax them to area code 360-47-7154.

Is there anybody else who would like to give oral testimony? Okay. All testimony – I don't see anybody raising their hands who wishes to give further testimony. All testimony received at this hearing and the other hearings held in Spokane on April the 24th, Bellevue on April the 26th and Lacey on April the 27th and all written comments received no later than May 4, 2012 will be part of the official hearing record for this proposal.

Ecology will send notice about the concise explanatory statement, or CES publication to everyone that provided written comments or oral testimony on this rule proposal, everyone that signed in for today's hearing and provided contact information, other interested parties on the agency's mailing list for this rule. The CES will, among other things, contain the agency's response to questions and issues of concern that were raised during the public comment period. If you'd like to receive a copy but did not sign in, please let one of the staff at this hearing know or contact Mike Blum or Michael Feldcamp at the contact information provided for submitting comments.

The next steps. The next step is adoption. Ecology Director Ted Sturdevant will consider the rule documentation and staff recommendations and will make a decision about adopting the proposal. The adoption is currently scheduled for no earlier than June 27, 2012. If the proposed rule should be adopted that day and filed with the code reviser, it would go into effect 21 days later.

Michael Feldcamp: 31.

Tim Hill: 31 days, excuse me, it would – if the proposed rule should be adopted that day and filed with the code reviser, it will go into effect 31 days later after June 27, 2012.

If we can be of further help to you, please do not hesitate to ask or you can contact Mike Blum or Michael Feldcamp if you have other

questions. On behalf of the Department of Ecology, thank you for coming. I appreciate your cooperation and courtesy. Let the record show that this hearing is adjourned at 3:11 PM, April 25, 2012. Thank you.

[End of Audio]

I am Bari Shreiner, Hearings Officer for this hearing. This afternoon we're to conduct a hearing on the proposed amendments for rule proposal for Chapter 173-360, WAC Underground Storage Tank Regulations. Let the record show that is 2:10 PM on Thursday, April 26th, and this hearing is being held at the Department of Ecology, Northwest Regional Office, 3190 160th Avenue Southeast, Bellevue, Washington 98008.

Legal notices of this hearing were published in the *Washington State Register* on April 4, 2012, Washington State Register number 12-07-084. In addition, notices of the hearing were mailed to about 5,000 people affected by or otherwise interested in the rule making. This included registered underground storage tank owners and facilities, service providers, operator training providers, business and local government associations and environmental groups. Email notices were also sent to about 75 interested people, and a news release was issued on March 27, 2012.

At this time I'd be calling people up who want to provide comments. Right now nobody has indicated they wanted to. Has anyone changed their mind, who'd like to come up at this time? Okay, let the record show that nobody wants to provide oral testimony today at the hearing.

I want to remind you that you can submit written comments, and please remember, they're due by May 4, 2012. This information is available on the handouts that we gave you today. You need to send them to Michael Feldcamp, Department of Ecology Toxics Cleanup Program, PO Box 47600, Olympia, Washington 98504-7600. You could also email them to USTRule@ecy.wa.gov. You could also fax them to 360-407-7154.

All testimony received at the public hearing – at the other public hearings and the one possibly tomorrow will be part of the record. The other hearings we held were in Spokane on April 24th, Yakima on April 25th, and as I said, tomorrow there will be a hearing in Lacey. And the written – the testimony at those hearings along with any written comments will be part of the official record for this proposal.

We'll send notice about the concise explanatory statement, which is the document that Ecology prepares to respond to all the comments, issues of concerns that are raised during the public comment period, to everyone that provided oral testimony and gave us contact information, to everybody that provided written comments, and also to anyone who signed in today that provided some contact information and all the interested party lists that the Ecology already has related to this rule. If you didn't provide us contact information and you'd like to receive this, please either let myself or Michael or Mike know before leaving today and we could add you to the list.

So the next step in the process, the next major step in the process we're moving towards is adoption. Ecology's Director, Ted Sturdevant, will consider the rule documentation and staff recommendations and will make a decision about adopting this proposal. Adoption is currently scheduled for no earlier than June 27, 2012. If the proposed rule should be adopted that day and filed with the code reviser, it would go into effect 31 days later.

If we can be of any other assistance today or help, please let us know or ask us questions. On behalf of Department of Ecology, thank you for coming. Let the record show that this hearing is concluded at 2:13 PM. Thank you very much.

[End of Audio]

I am Bari Schreiner, Hearings Officer for this hearing. This afternoon we're here to conduct a hearing on the proposed amendments for the rule proposal for Chapter 173-360, WAC Underground Storage Tank Regulations. Let the record show that's 1:56 PM on April 27th, and this hearing is being held at the Department of Ecology Headquarters, 300 Desmond Drive Southeast, Lacey, Washington 98503.

Legal notices of this hearing were published in the *Washington State Register* on April 4, 2012, Washington State Register number 12-07-084. In addition, notices of the hearing were mailed to about 5,000 people affected by or otherwise interested in the rule making, this included registered underground storage tank owners and facilities, service providers, operator training providers, business and local government associations and environmental groups. Email notices were also sent to about 75 interested people, and a news release was issued on March 27, 2012.

Right now I show nobody signed up who wanted to provide testimony. Has anyone changed their mind who would like to come up at this time? Okay, we'll let the record show that no one has indicated that they want to provide testimony. If you would like to send Ecology written comments please remember that they are due by May 4, 2012. This information – I'm gonna provide you the address but it's also on some of the handouts that were on the side table. You need to send your written comments to Michael Feldcamp, Department of Ecology Toxics Cleanup Program, PO Box 47600, Olympia, Washington 98504-7600. You could also email them to USTRule@ecy.wa.gov, or fax them to 360-407-7154.

Besides this hearing, Ecology also held hearings in Spokane on April 24th, Yakima on April 25th, Bellevue on April 26th. All the testimony provided at those hearings along with any written comments received no later than May 4, 2012 will be part of the official record for this proposal.

Ecology will send notice about the concise explanatory statement, which is the document the agency puts together to respond to all the comments and issues of concerns that we heard during the comment period. We'll send notice about that document being available to everyone that provided written comments or oral testimony that also provided us with contact information, anyone who signed in at one of the hearings that gave us contact information, or anyone that's on our other interested party lists that the agency is already maintaining on this rule proposal. If you haven't provided us with your contact information and you want to be on that list, please either let me know or you could let Michael or Mike know and we'll get you added to those lists.

The next major step in the process is adoption. Ecology's Director, Ted Sturdevant, will consider the rule documentation, staff recommendations and will make a decision about whether or not to adopt this proposal. Adoption is currently scheduled for no earlier than June 27, 2012. If the proposed rule should be adopted on that day and filed with the code reviser, it becomes effective 31 days later.

If we can be of any other assistance to you today or if you want to ask more questions, please let us know. Thank you very much for coming. Let the record show that this hearing is adjourned at 1:59 PM. Thank you.

[End of Audio]

Appendix D

Differences between
Proposed and Adopted Rule Language

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EDITOR'S NOTE: Differences between the Proposed and Adopted Rule Language are tracked using strikeouts and underlines. They are also highlighted and identified by a line in the left margin.

AMENDATORY SECTION (Amending WSR 95-04-102, filed 2/1/95, effective 3/4/95)

WAC 173-360-120 Definitions. For the purposes of this chapter, the following definitions shall apply:

"Abandoned" means left unused indefinitely, without being substantially emptied or permanently altered structurally to prevent reuse.

"Aboveground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of an UST system and aboveground releases associated with overfills and transfer operations as the regulated substance moves to or from an UST system.

"Accidental release" means any sudden or nonsudden release of petroleum from an underground storage tank that results in a need for corrective action and/or compensation for bodily injury or property damage neither expected nor intended by the tank owner or operator.

"Ancillary equipment" means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST.

"Belowground release" means any release to the subsurface of the land and/or to groundwater. This includes, but is not limited to, releases from the belowground portions of an underground storage tank system and belowground releases associated with overfills and transfer operations as the regulated substance moves to or from an underground storage tank.

"Beneath the surface of the ground" means beneath the ground surface or otherwise covered with earthen materials.

"Bodily injury" shall have the meaning given to this term by applicable state law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for bodily injury.

"Cathodic protection" means a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. For example, a tank system can be cathodically protected through the application of either galvanic anodes or impressed current.

"CERCLA" means the Comprehensive Environmental Response,

Compensation, and Liability Act of 1980, as amended.

"Certified UST supervisor" means a person certified by the International Fire Code Institute or another nationally recognized organization, as approved by the department. Washington registered professional engineers who are competent, by means of examination, experience, or education, to perform site assessments, are not required to be certified for site assessment work.

"Change-in-service" means to change the substances stored in an UST system from regulated substances to unregulated substances.

"Class A operator" means an individual designated by an UST system owner or operator as having primary responsibility for the operation and maintenance of the system. The Class A operator typically manages resources and personnel, such as establishing work assignments, to achieve and maintain compliance with regulatory requirements.

"Class B operator" means an individual designated by an UST system owner or operator as having control of or responsibility for the day-to-day operation and maintenance of the system. The Class B operator typically performs or ensures the performance of operation and maintenance activities at an UST facility, maintains records of those activities, and reports those activities to the department.

"Class C operator" means an employee of an UST system owner or operator responsible for initially responding to alarms or other indications of emergencies caused by spills, overfills, leaks, or releases from an UST system. The Class C operator typically controls or monitors the dispensing or sale of regulated substances from the system.

"Closure" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "decommissioning."

"Compatible" means the ability of two or more substances or materials to maintain their respective physical and chemical properties upon contact with one another such that the stored substance will not pass through the wall or lining of the tank and connected piping for the design life of the tank system under conditions likely to be encountered in the UST.

"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping that joins two UST systems should be allocated equally between them.

"Consumptive use" with respect to heating oil means

consumed on the premises.

"Controlling interest" means direct ownership of at least fifty percent of the voting stock of another entity.

"Corrosion expert" means a person who possesses a thorough knowledge of the physical sciences and the principles of engineering and mathematics acquired by a professional education and related practical experience, and is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be accredited or certified as being qualified by the National Association of Corrosion Engineers or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Decommissioning" means to take an underground storage tank out of operation, either temporarily or permanently, in accordance with WAC 173-360-380 or 173-360-385. The term is synonymous with "closure."

"Deferral" means a category of UST systems which are subject to certain, but not all, of the requirements of this chapter as specified in WAC 173-360-110(3).

"Delegated agency" means a state or local government agency which has been delegated responsibility by the department for administering any portion of an UST program.

"De minimis concentration" means either less than one inch of regulated substance, or less than a reportable quantity, as defined under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

"Department" means the department of ecology.

"Dielectric material" means a material that does not conduct direct electrical current. Dielectric coatings are used to electrically isolate UST systems from the surrounding soils. Dielectric bushings are used to electrically isolate portions of the UST system (e.g., tank from piping).

"Director" means the director of the department of ecology.

"Dispenser" means a device used to dispense and meter regulated substances from an UST system.

"Dispenser system" means a dispenser and the aboveground equipment necessary to connect the dispenser to an UST system, including check valves, shear valves, unburied risers, flexible connectors, and other transitional components.

"Double-walled tanks" and "double-walled piping" mean tanks and piping consisting of an inner wall and an outer wall with an interstitial space capable of being monitored for leaks.

"Electrical equipment" means underground equipment that contains dielectric fluid that is necessary for the operation of equipment such as transformers and buried electrical cable.

"Emergency power generator" means an engine that uses fuel to produce auxiliary electrical or mechanical energy for use in emergencies.

"Emergency power generator tank" means a tank that stores fuel solely for use by an emergency power generator.

"Excavation zone" means the volume containing the UST system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the UST system is placed at the time of installation.

"Existing UST system" means an UST system used to contain an accumulation of regulated substances or for which installation had commenced on or before December 22, 1988. Installation is considered to have commenced if: The owner or operator had obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system; and if

Either a continuous on-site physical construction or installation program had begun; or

The owner or operator had entered into contractual obligations--which cannot be ((~~cancelled~~)) canceled or modified without substantial loss--for physical construction at the site or installation of the tank system to be completed within a reasonable time.

"Facility compliance tag" means a white-colored metal plate with a green-colored identification number issued by the department for display at an UST facility in a location clearly visible to the product deliverer and persons withdrawing waste oil. Each UST facility is identified by a facility compliance tag. Except as otherwise provided in this chapter, it is unlawful for regulated substances to be delivered or deposited into an UST system, or withdrawn from a waste oil UST system, at an UST facility without a valid and properly displayed facility compliance tag.

"False alarm" means indicating that an UST system is leaking when in fact it is tight.

"Farm tank" is a tank located on a tract of land devoted to the production of crops or raising animals, including fish, and associated residences and improvements. A farm tank must be located on the farm property and used for farm purposes. "Farm" includes fish hatcheries, rangeland, and nurseries with growing operations. It does not include laboratories where animals are raised, land used to grow timber, pesticide aviation operations, retail stores or garden centers where nursery products are marketed but not grown, cemeteries, golf courses, or other facilities dedicated primarily to recreation or aesthetics, or other nonagricultural activities.

"Field-constructed tank" means an underground storage tank

that is constructed in the field rather than factory built because of its large size.

"Financial reporting year" means the latest consecutive twelve-month period for which any of the following reports used to support a financial test is prepared: A 10-K report submitted to the SEC; an annual report of tangible net worth submitted to Dun and Bradstreet; or annual reports submitted to the Energy Information Administration or the Rural Electrification Administration. "Financial reporting year" may thus comprise a fiscal or a calendar year period.

"Firm" means any business, including but not limited to corporations, limited partnerships, and sole proprietorships, engaged in performing tank services.

"Flow-through process tank" is a tank that forms an integral part of a production process through which there is a steady, variable, recurring, or intermittent flow of materials during the operation of the process. Flow-through process tanks do not include tanks used for the storage of materials prior to their introduction into the production process or for the storage of finished products or by-products from the production process.

"Free product" refers to a regulated substance that is present as a nonaqueous phase liquid (e.g., liquid not dissolved in water).

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

"Groundwater" means water in a saturated zone or stratum beneath the surface of land or below a surface water body.

"Hazardous substance UST system" means an underground storage tank system that contains a hazardous substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C) or any mixture of such substances and petroleum, and which is not a petroleum UST system.

"Heating oil" means petroleum that is No. 1, No. 2, No. 4--light, No. 4--heavy, No. 5--light, No. 5--heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils. Heating oil is typically used in the operation of heating equipment, boilers, or furnaces.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air or hydraulic fluid to operate lifts, elevators, and other similar devices.

"Immiscible" means largely incapable of blending or mixing.

"Installation" means the activity of placing an underground storage tank system or any part thereof in the ground and preparing it to be placed in service.

"Interstitial space" means the space between the primary and secondary containment systems (e.g., the space between the inner and outer walls of a tank or pipe).

"Legal defense cost" is any expense that an owner or operator or provider of financial assurance incurs in defending against claims or actions brought: By the United States Environmental Protection Agency (EPA) or a state to require corrective action or to recover the costs of corrective action; by or on behalf of a third party for bodily injury or property damage caused by an accidental release; or by any person to enforce the terms of a financial assurance mechanism.

"Liquid trap" means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. These liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

"Maintenance" means the normal operational upkeep to prevent an underground storage tank system from releasing a regulated substance.

"Motor fuel" means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, and is typically used in the operation of a motor engine.

"New UST system" means a tank system that will be used to contain an accumulation of regulated substances and for which installation commenced after December 22, 1988. (See also "existing tank system.")

"Noncommercial purposes" with respect to motor fuel means not for resale.

"Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in a release from an underground storage tank.

Note: This definition is intended to assist in the understanding of WAC 173-360-400 through 173-360-499 and is not intended either to limit the meaning of "occurrence" in a way that conflicts with standard insurance usage or to prevent the use of other standard insurance terms in place of "occurrence."

"On the premises where stored" with respect to heating oil means UST systems located on the same property where the stored heating oil is used.

"Operational life" refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under WAC 173-360-380 through

173- 360-398.

"Operator" means any person in control of, or having responsibility for, the daily operation of the UST system.

"Overfill release" is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

"Owner" means: In the case of an UST system in use on November 8, 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of regulated substances; and in the case of any UST system in use before November 8, 1984, but no longer in use on that date, any person who owned such UST immediately before the discontinuation of its use. In the event that the owner of an UST system cannot be physically located, the owner shall be the person who owns the property where the UST system is located, except any lien holder and any agency of the state or unit of local government which acquired ownership or control involuntarily through bankruptcy, tax delinquency, abandonment, or circumstances in which the government involuntarily acquires title. This exclusion does not apply to an agency of the state or unit of local government which has caused or contributed to a release or threatened release of a regulated substance from the UST system.

"Owner or operator," means, for the purposes of WAC 173-360-400 through 173-360-499, when the owner or operator are separate parties, the party that is responsible for obtaining or has obtained financial assurances.

"Party" means a person or group concerned or having or taking part in any affair, matter, transaction, or proceeding.

"Permanently closed" means: (1) In the case of an UST system taken out of operation before December 22, 1988, the UST system was substantially emptied of regulated substances or permanently altered structurally to prevent reuse; (2) in the case of an UST system taken out of operation after December 21, 1988, and before the effective date of this chapter, the UST system was closed in accordance with 40 ~~CFR~~C.F.R. 280; and (3) in the case of an UST system taken out of operation on or after the effective date of this chapter, the UST system was closed in accordance with WAC 173-360-385.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States government.

"Petroleum marketing facilities" include all facilities at which petroleum is produced or refined and all facilities from which petroleum is sold or transferred to other petroleum

marketers or to the public.

"Petroleum marketing firms" are all firms owning petroleum marketing facilities. Firms owning other types of facilities with USTs as well as petroleum marketing facilities are considered to be petroleum marketing firms.

"Petroleum UST system" means an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils.

"Pipe" or "piping" means a hollow cylinder or tubular conduit that is constructed of nonearthen materials.

"Pipeline facilities (including gathering lines)" are new and existing pipe rights-of-way and any associated equipment, facilities, or buildings.

"Piping run" means all underground piping connecting an individual submersible pump or suction stub to associated dispenser systems or other end-use equipment.

"Product deliverer" means any person who delivers or deposits product into an UST system. This term includes major oil companies, jobbers, petroleum transportation companies, or other product delivery entities.

"Property damage" shall have the meaning given this term by applicable state law. This term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage. However, such exclusions for property damage shall not include corrective action associated with releases from tanks which are covered by the policy.

"Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of an underground storage tank through one of the mechanisms listed in WAC 173-360-413 through 173-360-436, including a guarantor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a state-required mechanism, or a state.

"Red tag" means a red-colored tag or device on the fill pipe of an UST system that clearly identifies the system as ineligible for product delivery or waste oil withdrawal. The tag or device is tamper resistant and is easily visible to the product deliverer and persons withdrawing waste oil. The tag or device clearly states and conveys, as applicable, that it is unlawful for regulated substances to be delivered or deposited into an UST system or withdrawn from a waste oil UST system.

"Regulated substance" means:

Any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and

Liability Act (CERCLA) of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and any other regulated substances); and

Petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (sixty degrees Fahrenheit and 14.7 pounds per square inch absolute). The term "regulated substance" includes but is not limited to petroleum and petroleum-based substances comprised of a complex blend of hydrocarbons derived from crude oil through processes of separation, conversion, upgrading and finishing, such as motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents, and used oils. The term "regulated substance" does not include propane or asphalt or any other petroleum product which is not liquid at standard conditions of temperature and pressure.

"Release" means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an UST system to groundwater, surface water or soils.

"Release detection" means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial space between the UST system and its secondary barrier or secondary containment around it.

"Repair" means to restore a tank or UST system component that has caused a release of a regulated substance from the UST system.

"Residential tank" is a tank located on property used primarily for dwelling purposes; such properties do not include dormitories, convents, mobile parks, apartments, hotels and similar facilities, unless the tank is used by the owner solely for his or her own personal use, rather than to maintain the overall facility.

"Retrofitting" means the repair or upgrading of an existing underground storage tank system including, but not limited to, installation of splash, spill and overfill protection, installing or replacing monitoring systems, adding cathodic protective systems, tank repair, replacement of piping, valves, fill pipes or vents and installing tank liners.

"Secondary containment" means a release prevention system for tanks and piping consisting of an inner barrier and an outer barrier with an interstitial space capable of being monitored for leaks.

"Septic tank" is a water-tight covered receptacle designed and used to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for

disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

"Site assessment" means investigating an UST site for the presence of a release at the time of closure or change-in-service.

"Site check" means investigating an UST site for the presence of a release when evidence indicates that a release may have occurred.

"((~~Stormwater~~)) Storm water or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation, or domestic, commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur. The collection of storm water and wastewater does not include treatment except where incidental to conveyance.

"Structural defect" means a hole or crack in the tank portion of the UST system, which has either caused a release from the system or is being repaired to prevent a release from the system.

"Substantial business relationship" means the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A guarantee contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor and the owner or operator.

"Supervisor" means a person certified by the International Fire Code Institute, or other nationally recognized organization, operating independently or employed by a contractor, who is responsible for directing and overseeing the performance of tank services at a facility.

"Surface impoundment" is a natural topographic depression, excavation, or diked area formed primarily of earthen materials (although it may be lined with synthetic materials) that is not an injection well.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets do not include intangibles such as goodwill and rights to patents or royalties. For purposes of this definition, "assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions.

"Tank" is a stationary device designed to contain an accumulation of regulated substances and constructed of nonearthen materials (e.g., concrete, steel, plastic) that provide structural support.

"Tank permit" means a tank tag, as required by RCW 90.76.020(4).

"Tank services" include underground storage tank installation, decommissioning, retrofitting, and testing.

"Temporarily closed UST system" means an UST system that has been removed from service and will be returned to service, undergo a change-in-service, or be permanently closed in the future.

"Termination" under WAC 173-360-476 and 173-360-480 means only those changes that could result in a gap in coverage as where the insured has not obtained substitute coverage or has obtained substitute coverage with a different retroactive date than the retroactive date of the original policy.

"Testing" means applying a method to determine the integrity of an underground storage tank.

"Tightness testing" means a procedure for testing the ability of a tank system to prevent an inadvertent release of any stored substance into the environment or, intrusion of groundwater into a tank system.

"Under-dispenser containment" or "UDC" means containment underneath a dispenser system designed to prevent leaks from the dispenser system from reaching soil or ground water.

"Underground area" means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

"Underground release" means any below ground release.

"Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is ten percent or more beneath the surface of the ground. This term does not include any of the exempt UST systems specified in WAC 173-360-110(2), or any piping connected thereto.

"Upgrade" means the addition or retrofit of some systems such as cathodic protection, lining, or spill and overfill controls to improve the ability of an underground storage tank system to prevent the release of regulated substances.

"UST site" or "site" means the location at which underground storage tanks are in place or will be placed. An UST site encompasses all of the property within a contiguous ownership that is associated with the use of the tanks.

"UST system" or "tank system" means an underground storage tank, connected underground piping, underground ancillary equipment, and containment system, if any.

"Wastewater treatment tank" means a tank that is designed

to receive and treat an influent wastewater through physical, chemical, or biological methods.

[Statutory Authority: Chapter 90.76 RCW. 95-04-102, § 173-360-120, filed 2/1/95, effective 3/4/95; 91-22-020 (Order 91-26), § 173-360-120, filed 10/29/91, effective 11/29/91; 90-24-017, § 173-360-120, filed 11/28/90, effective 12/29/90.]

AMENDATORY SECTION (Amending WSR 90-24-017, filed 11/28/90, effective 12/29/90)

WAC 173-360-160 Enforcement. (1) **Authority.** The director may seek appropriate injunctive or other judicial relief by filing an action in Thurston County Superior Court or issuing such order as the director deems appropriate to:

(a) Enjoin any threatened or continuing violation of this chapter or chapter 90.76 RCW;

(b) Restrain immediately and effectively a person from engaging in unauthorized activity that results in a violation of any requirement of this chapter or chapter 90.76 RCW and is endangering or causing damage to public health or the environment;

(c) Require compliance with requests for information, access, testing, or monitoring under WAC 173-360-140 or RCW 90.76.060; ((~~or~~))

(d) Prohibit the delivery, deposit, or acceptance of a regulated substance to an UST system identified by the department to be ineligible for such delivery, deposit, or acceptance in accordance with WAC 173-360-165 and chapter 90.76 RCW; or

(e) Assess and recover civil penalties authorized under WAC 173-360-170 and RCW 90.76.080.

(2) **Procedures.** The department's enforcement procedures shall be consistent with and no less stringent than those required by 40 ~~CFR~~C.F.R. 281.41 ((~~and amendments thereto~~)), as amended, and section 9012 of the Solid Waste Disposal Act (42 U.S.C. Sec. 6991k).

(3) **Appeals.** A person subject to an order issued under this chapter may appeal the order to the pollution control hearings board in accordance with RCW 43.21B.310.

[Statutory Authority: Chapter 90.76 RCW. 90-24-017, § 173-360-160, filed 11/28/90, effective 12/29/90.]

NEW SECTION

WAC 173-360-165 Delivery prohibition. (1) **Authority.** If the department determines the owners and operators of an UST system are violating any requirement of this chapter or chapter 90.76 RCW, the department may prohibit the delivery, deposit, or acceptance of regulated substances to the system or the entire UST facility where the system is located.

(2) **Procedures.** The department's procedures for enforcing delivery prohibition shall be consistent with and no less stringent than those required by section 9012 of the Solid Waste Disposal Act (42 U.S.C. Sec. 6991k).

(3) **Identification.** The department may identify an UST system subject to delivery prohibition by either:

(a) Affixing a red tag to the fill pipe of the system; or

(b) Revoking the facility compliance tag of the UST facility where the system is located.

(4) **Prohibition.** Without the prior written authorization of the department, product deliverers may not deliver or deposit, and owners and operators may not accept the delivery or deposit of, regulated substances into an UST system if:

(a) A red tag is attached to the fill pipe of the system; or

(b) A valid facility compliance tag is not properly displayed at the UST facility where the system is located.

(5) **Withdrawal of waste oil.** Without the prior written authorization of the department, persons may not withdraw, and owners and operators may not allow the withdrawal of, regulated substances from a waste oil UST system subject to delivery prohibition.

(6) **Unauthorized removal of red tags.** No person may remove or alter a red tag without the prior written authorization of the department. The unauthorized removal or alteration of a red tag constitutes a violation of this chapter.

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PART VII
OPERATOR TRAINING REQUIREMENTS

NEW SECTION

WAC 173-360-700 Purpose and applicability. (1) This part establishes a mandatory operator training program for three distinct classes of individuals who operate and maintain UST systems. The program is designed to prevent and mitigate releases from UST systems by ensuring that those individuals know how to properly operate and maintain those systems and respond to any spills, overfills, leaks, or releases from those systems.

(2) Owners and operators of UST systems shall continuously comply with the requirements of this part from their installation until their permanent closure or change-in-service, including during any period of temporary closure.

[]

NEW SECTION

WAC 173-360-710 Designation of operators. UST system owners and operators shall designate individuals as Class A, Class B, and Class C operators in accordance with the requirements of this section.

(1) At least one Class A and one Class B operator must be designated for each UST system or group of systems at an UST facility.

(2) Each individual who meets the definition of Class C operator at an UST facility must be designated as a Class C operator. Class C operators must be employees of the UST system owner or operator.

(3) Separate individuals may be designated for each operator class or an individual may be designated to more than one operator class.

[]

NEW SECTION

WAC 173-360-720 Timing of operator training. UST system owners and operators shall ensure that each Class A, Class B, and Class C operator is trained in accordance with the requirements in WAC 173-360-730 by the dates specified in this section.

(1) Class A, Class B, and Class C operators must initially be designated and trained by December 31, 2012.

(2) Class A and Class B operators designated after December 31, 2012, must be trained within sixty days of assuming duties of the operator class.

(3) Class C operators designated after December 31, 2012, must be trained before assuming duties of the operator class.

[]

NEW SECTION

WAC 173-360-730 Training requirements for operators. UST system owners and operators shall ensure that each Class A, Class B, and Class C operator is trained in accordance with the requirements of this section. Individuals designated for more than one operator class must successfully complete the training required for each operator class that he or she is designated.

(1) **Class A and Class B operators.** Each Class A and Class B operator must successfully complete a classroom, computer, or field-based training program or examination that:

(a) Is developed and administered by the department, an UST system owner or operator approved by the department, or an independent third- party approved by the department;

(b) Covers the following subject areas and associated requirements in this chapter. Training programs and examinations may be facility-specific:

(i) Administrative requirements, including:

(A) Licensing and fees;

(B) Facility compliance tags;

(C) Authority to accept product delivery;

(D) Financial responsibility; and

(E) Reporting and recordkeeping;

(ii) Certification and use of service providers;

(iii) Compliance inspections and enforcement;

(iv) Overview of UST systems and components;

(v) Product and equipment compatibility;

(vi) Installation and repair requirements;

(vii) Spill and overfill prevention;

(viii) Release detection;
(ix) Corrosion protection and internal lining;
(x) Secondary and under-dispenser containment;
(xi) Operation and maintenance requirements;
(xii) Release reporting and confirmation requirements;
(xiii) Overview of site assessment requirements;
(xiv) Overview of cleanup requirements for releases, including the applicability of chapter 173-340 WAC;
(xv) Temporary closure, permanent closure, and change-in-service requirements;
(xvi) Operator training requirements, including training of Class C operators; and
(xvii) Any other subject areas specified by the department; and
(c) Includes an evaluation of operator knowledge, such as testing or practical examination, that reasonably determines whether the operator has the necessary knowledge and skills to meet the responsibilities of the class.
(2) **Class C operators.** Each Class C operator must successfully complete a classroom, computer, or field-based training program that:
(a) Is developed and administered by the department, a ~~designated~~trained Class A or Class B operator ~~at the UST facility~~, ~~and/~~or an independent third party approved by the department;
(b) Provides ~~facility-specific~~ training ~~and written instructions~~ on how to respond to emergencies and alarms, including:
(i) Locating emergency response equipment;
(ii) Operating any emergency shut-off systems;
(iii) Identifying and responding to any alarms; and
(iv) Responding to and reporting any spills or releases; and
(c) Includes an evaluation of operator knowledge, such as testing or practical examination, that reasonably determines whether the operator has the necessary knowledge and skills to meet the responsibilities of the class.
(3) **Reciprocity for out-of-state training.** Class A and Class B operators previously designated in another state or at a tribal UST facility shall be deemed to meet the training requirements in subsection (1) of this section if:
(a) They successfully completed a training program or examination meeting the requirements of that state or 40 ~~CFR~~C.F.R. Part 280, as applicable; and
(b) They possess the training records required under WAC 173-360-760(2) and the records identify the state where they were designated and trained.

(4) **Acceptance of prior in-state training.**

(a) Class A and Class B operators who successfully completed an applicable training program or examination approved by the department before ~~(the effective date of this rule)~~October 1, 2012, and possess the training records required in WAC 173-360-760(2) shall be deemed to meet the training requirements in subsection (1) of this section.

(b) Class C operators who successfully completed a training program approved by the department or administered by a trained Class A or Class B operator before ~~(the effective date of this rule)~~October 1, 2012, and possess the training records required in WAC 173-360-760(2) shall be deemed to meet the training requirements in subsection (2) of this section. ~~However, Class C operators must still be retrained in accordance with WAC 173-360-740(2).~~

[]

NEW SECTION

WAC 173-360-740 Retraining requirements for Class A and Class B operators. UST system owners and operators shall ensure that Class A~~,~~ and Class B~~, and Class C~~ operators are retrained, as applicable, in accordance with the requirements of this section.

~~(1) Class A and Class B operators.~~

~~(a)~~(1) **Applicability.** If the department determines the owners and operators of an UST system are not in compliance with the requirements of this chapter, the department may require the Class A and Class B operators of that system to be retrained in accordance with ~~(b) of this subsection~~subsection (2) of this section. However, this provision does not apply to Class A and Class B operators who are retrained annually using a training program or examination meeting the requirements in WAC 173-360-730(1).

~~(b)~~(2) **Requirements.** Within sixty days of receipt of the department's determination of noncompliance, Class A and Class B operators requiring retraining must successfully complete a training program or comparable examination meeting the requirements in WAC 173-360-730(1) and submit a copy of the certificate of completion to the department. At a minimum, the retraining must cover the areas determined to be out of compliance.

~~(2) Class C operators.~~

~~(a) **Frequency.** Class C operators must be retrained at least annually and whenever the emergency response procedures at~~

~~an UST facility are changed. Class C operators must also be retrained before assuming the duties of a Class C operator at a different UST facility.~~

~~(b) **Requirements.** Class C operators requiring retraining must successfully complete a training program meeting the requirements in WAC 173-360-730(2).~~

[]

NEW SECTION

WAC 173-360-745 Operation and maintenance plans. UST system owners and operators shall ensure that operation and maintenance plans are developed and maintained, as applicable, in accordance with the requirements of this section.

(1) **Applicability.** If the department determines the owners and operators of an UST system are not in compliance with the requirements of this chapter, the department may require the owners and operators to develop an operation and maintenance plan for each UST system at the UST facility where the noncompliant system is located. The department may require the development of such a plan in place of or in addition to any retraining of Class A or Class B operators required under WAC 173-360-740.

(2) **Development.** Operation and maintenance plans for UST systems must be developed and a copy submitted to the department within sixty days of receipt of the department's determination of noncompliance.

(3) **Updates.** The operation and maintenance plan for an UST system must be updated within sixty days of any modification of the system that changes how the system must be operated and maintained under this chapter.

(4) **Content.** At a minimum, the operation and maintenance plan for an UST system must include the actions required under this chapter to operate and maintain the system, including:

(a) Release detection;

(b) Spill and overfill prevention;

(c) Corrosion protection, if applicable; and

(d) Internal lining, if applicable.

(5) **Recordkeeping.** Operation and maintenance plans for UST systems must be maintained and made available to the department in accordance with WAC 173-360-210(3). Plans must be maintained until UST systems are permanently closed or undergo a change-in-service.

[]

NEW SECTION

WAC 173-360-750 Emergency response requirements. (1) **Presence of operators.** While an UST facility is manned, UST system owners and operators shall ensure at least one of the individuals manning the facility is a properly trained Class A, Class B, or Class C operator.

(2) **Signage.** At each UST facility, UST system owners and operators shall post and maintain signage providing emergency response information. The signage must:

(a) Be posted in prominent areas of the facility that are easily visible to individuals who dispense or deliver regulated substances;

(b) Identify the location of fire extinguishers and any emergency shut-off devices at the facility; and

(c) Provide instructions on what to do in case of an emergency at the facility. At a minimum, the instructions must include the following or equivalent wording:

(Name and address of facility)

IN CASE OF FIRE, SPILL OR RELEASE

(Insert if applicable: Use emergency shut off)

Call the fire department: (911 or local fire department telephone number)

Call the facility operator: (24-hour telephone number)

[]

NEW SECTION

WAC 173-360-760 Documentation and recordkeeping. UST system owners and operators shall maintain records documenting all currently designated Class A, Class B, and Class C operators at an UST facility and the training received by those operators. The records must be maintained and made available in accordance with WAC 173-360-210(3).

(1) **Designated operators.** Records documenting Class A, Class B, and Class C operators at an UST facility must include the following information:

(a) The facility's name, address, and compliance tag number; and

(b) For each individual designated at the facility:

(i) The name of the individual;

(ii) The UST systems and operator classes to which the individual has been designated;

(iii) The date the individual assumed the duties of each operator class; and

(iv) The date the individual completed initial training and any required retraining for each operator class.

(2) **Training of designated operators.** Records documenting the initial training and any required retraining of Class A, Class B, and Class C operators must include a certificate of completion. Certificates must include the following information:

(a) The name of the trainee;

(b) The date the trainee completed the training;

(c) The operator class or classes covered by the training;

(d) The name of the company providing the training; and

(e) For classroom and field-based training, the printed name and signature of the trainer or examiner~~; and~~.

~~(f) For Class C operator training, the printed name and signature of a Class A or Class B operator.~~

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PART VIII
SECONDARY AND UNDER-DISPENSER CONTAINMENT REQUIREMENTS

NEW SECTION

WAC 173-360-800 Purpose and applicability. (1) This part establishes requirements for secondary containment of tanks and piping and for under-dispenser containment.

(2) The applicability of the requirements in this part does not affect the applicability of any other requirements in this chapter.

(3) In the event of any conflict between the provisions in this part and the other provisions in this chapter, the provisions in this part shall govern.

(4) UST system owners and operators shall ensure compliance with the applicable requirements in this part.

[]

NEW SECTION

WAC 173-360-810 Secondary containment of tanks. (1) **Applicability.** Tanks installed or replaced after ~~July 1, 2007~~October 1, 2012, must be secondarily contained and monitored for releases in accordance with the requirements in this section.

(2) **Secondary containment.** In addition to meeting the requirements in WAC 173-360-305(1), tanks must meet the secondary containment requirements in this subsection.

(a) **Performance standards.** Tanks must be double-walled. Double-walled tanks must be designed, constructed, and installed to:

(i) Contain any regulated substances leaking from the primary space (through the inner wall) within the interstitial space until they are detected and removed;

(ii) Prevent the release of regulated substances into the environment throughout the operational life of the UST system; and

(iii) Allow for interstitial monitoring.

(b) **Codes of practice.** Double-walled tanks must be designed and constructed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory. The following codes of practice may be used to meet this requirement:

(i) Underwriters Laboratories, Standard 58, "Standard for

Safety for Steel Underground Tanks for Flammable and Combustible Liquids";

(ii) Underwriters Laboratories, Standard 1316, "Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures";

(iii) Underwriters Laboratories, Standard 1746, "Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks";

(iv) Steel Tank Institute, Standard F841, "Standard for Dual Wall Underground Steel Storage Tanks"; or

(v) Steel Tank Institute, Specification F922, "Specification for Permatank®."

(3) **Release detection.** Double-walled tanks must be monitored interstitially for releases at least every thirty days in accordance with WAC 173-360-345 (6)(h)(i). Methods that continuously monitor the interstitial space using a vacuum, pressure, or a liquid must be able to detect a breach in both the inner and outer walls.

[]

NEW SECTION

WAC 173-360-820 Secondary containment of piping. (1) **Applicability.** Piping installed or replaced after ~~July 1, 2007~~October 1, 2012, routinely containing regulated substances and in contact with the ground must be secondarily contained and monitored for releases in accordance with the requirements in this section. However, the requirements in this section do not apply to:

(a) Suction piping meeting the standards in WAC 173-360-350 (2)(b)(i) through (v); or

(b) Piping replacing less than fifty percent of a single-walled piping run.

(2) **Replacement of piping.** Unless otherwise approved or directed by the department, if fifty percent or more of a single-walled piping run is replaced after ~~(the effective date of this rule)~~October 1, 2012, then the entire piping run must be replaced.

(3) **Secondary containment.** In addition to meeting the requirements in WAC 173-360-305(2), piping must meet the secondary containment requirements in this subsection.

(a) **Performance standards.** Piping must be double-walled. Containment sumps may also be used as part of the secondary containment and interstitial monitoring system for piping.

(i) **Piping.** Double-walled piping must be designed,

constructed, and installed to:

(A) Contain any regulated substances leaking from the primary space (through the inner wall) within the piping's interstitial space or a containment sump until they are detected and removed;

(B) Prevent the release of regulated substances into the environment throughout the operational life of the UST system; and

(C) Allow for interstitial monitoring within either the piping's interstitial space or a containment sump.

(ii) **Containment sumps.** Containment sumps used as part of the secondary containment and interstitial monitoring system for piping must be designed, constructed, and installed to:

(A) Be liquid-tight on its sides, bottom, and at any penetrations;

(B) Allow for visual inspection and access to the components in the sump; and

(C) Allow for interstitial monitoring of the piping. The piping's interstitial space must be exposed within the sump. Sensors must be placed within the sump where they are able to detect any leak of regulated substances.

(b) **Codes of practice.** Double-walled piping must be designed and constructed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory. The following codes of practice may be used to meet this requirement:

(i) Underwriters Laboratories, Standard 971, "Standard for Non-metallic Underground Piping for Flammable Liquids"; or

(ii) Underwriters Laboratories, Standard 971A, "Outline of Investigation for Metallic Underground Fuel Pipe."

(4) **Release detection.** Double-walled piping must be monitored for releases using the methods specified in this subsection.

(a) Pressurized piping must be monitored interstitially for releases at least every thirty days in accordance with WAC 173-360-345 (6)(h)(i) and be equipped with an automatic line leak detector in accordance with WAC 173-360-350 (3)(a).

(b) Suction piping not meeting the standards in WAC 173-360-350 (2)(b)(i) through (v) must be monitored interstitially for releases at least every thirty days in accordance with WAC 173-360-345 (6)(h)(i).

(c) Methods that continuously monitor the interstitial space using a vacuum, pressure, or a liquid must be able to detect a breach in both the inner and outer walls.

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NEW SECTION

WAC 173-360-830 Under-dispenser containment. (1) **Applicability.** UST systems connected to a dispenser must be equipped with under-dispenser containment meeting the requirements of this section if the dispenser, dispenser system, or underground piping connected to the dispenser system is installed or replaced after October 1, 2012~~under:~~

~~(a) Any dispenser system installed or replaced after July 1, 2007;~~

~~(b) Any dispenser replaced after (the effective date of this rule); or~~

~~(c) Any dispenser system connected to underground piping installed or replaced after (the effective date of this rule)~~.

(2) **Performance standards.** Under-dispenser containment must be designed, constructed, and installed to:

(a) Be liquid-tight on its sides, bottom, and at any penetrations; and

(b) Allow for visual inspection and access to the components in the containment system.

(3) **Installation and reporting.** Installation of under-dispenser containment must be:

(a) Performed by an UST supervisor certified to install UST systems under Part 6 of this chapter;

(b) Performed in accordance with the manufacturer's instructions; and

(c) Certified and reported in accordance with WAC 173-360-630 (2)(a).

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